



ROYAL BURGH OF ST. ANDREWS

REPORTS

BY

MEDICAL OFFICER

AND

SANITARY INSPECTOR

For the Year 1937



ROYAL BURGH OF ST. ANDREWS

REPORTS

BY

MEDICAL OFFICER

AND

SANITARY INSPECTOR

For the Year 1937



Digitized by the Internet Archive
in 2016 with funding from
Wellcome Library

<https://archive.org/details/b2865688x>

*To the Department of Health for Scotland, The Provost, Magistrates
and Councillors of the Royal Burgh of St. Andrews.*

Gentlemen,

*I have the honour to submit my Annual Report on the
Health of the Burgh during 1937.*

*The chief difficulty confronting the Town Council was the housing
shortage. Adequate steps have now been taken to provide alternative
accommodation for families residing in unfit or overerowed houses
but a solution of the problem presented by ordinary applicants for
houses has not yet been reached. Once statutory obligations have
been met, however, a clearer course of action may emerge.*

*On the other hand, it is satisfactory to be able to report that the
record of health which the town has enjoyed for so many years was
continued unbroken.*

*I take the opportunity of expressing my indebtedness to my
colleagues for their unfailing assistance.*

I have the honour to be, Gentlemen,

Your obedient Servant,

G. MATTHEW FYFE,

Medical Officer of Health

Public Health Department,

St. Andrews,

30th June, 1938.

INDEX.

Statistical Comments	..	..	..	..	<i>Page</i> 5
Environmental Conditions—					
Drainage	..	..	..	..	7
Nuisances	..	..	..	..	8
Refuse Disposal	..	..	..	..	8
Water Supply	..	..	..	..	9
Atmospheric Conditions		..	..	..	10
Housing Conditions	..	..	..	..	11
Overcrowding	..	..	..	..	13
Total Housing Requirements			..	..	14
Building Programme		..	..	..	15
Re-housing of Single Persons			..	..	16
Building Bye-laws	..	..	..	..	16
Town Planning	..	..	..	..	16
Infectious Diseases—					
Incidence	..	..	..	..	17
City Fever Hospital	..	..	..	..	19
Diphtheria Immunisation		..	..	..	20
Maternal and Child Welfare Scheme—					21
Food Supply—					
Meat Supply	..	..	..	..	25
Milk Supply	..	..	..	..	26
Sale of Food and Drugs Acts		..	..	..	27
Factory and Workshops Acts		..	..	..	27
Air Raid Precautions	..	..	..	..	27
Report of Sanitary Inspector		..	..	..	29

STATISTICAL COMMENTS.

According to the estimate of the Registrar-General, a further decrease occurred in the population of the Burgh. In 1936 it was estimated at 8,531: in 1937 at 8,493. This figure does not include the population of St. Leonards School for Girls, which is slightly in excess of 500.

During the year there were 104 births—55 males and 49 females—the birth rate being 12·2 per 1,000 of population as compared with 11·1 in 1936. Illegitimate births numbered 7.

The number of marriages registered was 56, the rate being 6·6 per 1,000 of population.

Corrected for transfers, the number of deaths from all causes was 113—38 males and 75 females—the rate per 1,000 of population being 13·4, the corresponding figure for the previous year being 12·8. The death rate exceeded the birth rate by 1·1 per 1,000 of population.

There were five deaths among infants under one year of age. The corresponding infantile mortality rate was 48 per 1,000 births. Of recent years the rate has been consistently low. The rate for Scotland in 1937 was 80 and for the County of Fife 67.

There were two deaths among children in the 1-5 years of age group and no deaths among children in the 5-10 years of age group.

The following were the causes of death among the population:—

Influenza	6
Other Epidemic Diseases	2
Tuberculosis of Respiratory System	2
Other infectious and parasitic diseases	1
Cancer, malignant disease	15
Diabetes mellitus	2
Cerebral haemorrhage, etc.	12
Other diseases of nervous system and sense organs	3
Heart Disease	32
Other circulatory diseases	6
Bronchitis	4
Pneumonia (all forms)	5
Other respiratory diseases	1
Gastric and duodenal ulcer	2
Diarrhoea	2
Diseases of the liver, etc.	1

Other digestive diseases	..	..	..	1
Acute and chronic nephritis	..	..	..	3
Other diseases of genito-urinary system	..	..	..	2
Congen. debil., prem. birth, malform., etc.	..	..	..	5
Violences	..	..	..	6
Total				113

65.5 per cent. of the people who died were 65 years of age and over. 23.9 per cent. of the total deaths occurred among people in the age group 35 to 64 years as compared with 24.8 per cent. in 1936. 4.4 per cent. of deaths, as compared with 6.4 per cent. in the previous year, occurred in the age group 10 to 34 years. 6.2 per cent. of deaths occurred among infants and children of 9 years and under as compared with 5.5 per cent. in 1936.

The principal cause of death, like that for the country as a whole, was diseases of the heart and arteries (28 per cent.). The majority of deaths from this cause occurred among people of 65 years of age and over. The fact bears witness not only to the increasing longevity of the population but also to improved environmental conditions. With the possible exception of affections of rheumatic origin, which usually claim their toll in deaths among persons under 40 years of age, people are now dying much less frequently from infective forms of heart disease than from degenerative conditions, the natural accompaniment of advanced years.

The number of deaths from cancer remained stationary at 13 per cent. of the total number of deaths. Intensive research has not yet defined the cause or cure of cancer, but earlier diagnosis and the use of radium have increased the chances of cure. In males and in females the most common site of cancer is the stomach and intestinal tract. The next most important sites, however, in males are the gullet and the tongue, and in females the breast and the womb. Many deaths from cancer might be prevented if people were to submit themselves for competent examination as soon as they detect abnormalities, no matter how ill-founded their forebodings may prove to have been.

A further slight reduction occurred in the number of deaths from cerebral haemorrhage which accounted for 11 per cent. of the total number of deaths as compared with 15 per cent. in 1936. Views are changing as regards the mechanism of apoplexy. The theory that cerebral haemorrhage is the outcome of rupture of a blood vessel in healthy brain tissue is giving way in considerable measure to the suggestion that prior to the haemorrhage, degenerative changes which ultimately involve the vessel, take place

in the surrounding cerebral tissue. The point is an important one in that it may throw some light upon an outstanding feature of mortality in Scotland, namely, the increase which has occurred in recent years in sudden deaths of which cerebral haemorrhage is an important cause. It has been claimed that sudden death and modern stress of living are related, but sudden deaths occur among people and communities unaffected by the rush and clamour of modern life. The one factor common to all is the change which has occurred in the national diet, and it may well be that the devitalised foodstuffs of to-day are having a harmful effect (avitaminosis) on delicate specialised body tissues, often resulting in their degeneration.

Deaths from infectious disease remained low. Six persons died from influenza which was prevalent during the early part of the year. Two people died from pulmonary tuberculosis, the incidence of which is comparatively slight in the town.

ENVIRONMENTAL CONDITIONS.

Drainage.

The drainage area of the Burgh extends to over 500 acres, and arrangements for the conveyance of sewage and storm waters are fully adequate. There are two main sewer outfalls which discharge into St. Andrews Bay at the east and west ends of the burghal foreshore. Sewage is not treated in any way but screening chambers have been provided to reduce solid masses so that gross pollution of the foreshore may be prevented. No cause for complaint arose throughout the year.

An additional 977 yards of sewer pipes were laid down to meet the needs of housing developments.

Prior to 1932, flooding of properties in the neighbourhood of the Kinness Burn was of regular occurrence. Since that year when Mr. W. Watson, the late Burgh Engineer, widened and banked the stream, no flooding has taken place. It is indeed satisfactory that his solution of a long standing and difficult problem in engineering should have proved so successful.

Another local landmark was swept away when the Pipeland Burn was diverted and piped into the Kinness Burn. Its bed was closed and levelled in the preparation of the site of the latest housing development.

St. Nicholas Dairy Farm remains the only property in the Burgh not connected with the municipal sewerage system. No difficulties arose in connection with the pipe which conveys crude sewage from the Farm to low water mark and no complaints were lodged. Obviously, however, the arrangement is unsatisfactory

in view of the increasing popularity of the East Sands as a place of resort during the summer months. The area is a low-lying one and special means will require to be employed, at considerable cost, to raise the sewage to the level of the east outfall main. Until, however, a decision has been reached regarding the future development of this outlying section of the Burgh, it is not likely that matters will be remedied.

Nuisances.

All the works of improvement at the Step Rock Bathing Pool outlined in the Report for 1936 were carried out. Regular grading of the bottom has rendered bathing safer and removal of rocky outcrops and levelling of hollows and crevices have made cleaning easier. With sufficient attention the Pool should always present a clean, attractive appearance.

Camping at St. Nicholas Farm was brought to an end by the proprietors who prohibited the ground being used for such purposes.

The number of dog licences issued during the year was 603, a figure equivalent to the proportion of one for every 14 persons.

Streets and by-ways continued to be so polluted by dogs, and certain dog owners showed such disregard for the public interest that the Town Council found themselves compelled to introduce a Byelaw rendering any person liable to penalty who permitted a dog on a lead to foul a footway. It is to be hoped that the Byelaw will prove sufficiently effective, although, so far, improvement has not been noticeable. The problem is one which is causing concern to the Local Authority. A reasonable solution would be found if dog owners would co-operate. If they fail to do so, the Town Council may reluctantly be compelled to consider applying for legal powers regulating the presence of dogs in public places. Stringent measures to that effect are in force in certain foreign capitals. It would be most unfortunate if such drastic steps were rendered necessary by the disregard and carelessness of the few.

No objectionable features arose in connection with the four chemical closets at the West Sands. On the other hand, nuisances in the neighbourhood have been greatly abated.

Refuse Disposal.

5,392 tons of house, trade and municipal refuse were disposed of during 1937, 4,680 tons having been collected from houses.

The collection of garden rubbish is presenting an increasingly difficult problem. The material is so bulky and space in collecting wagons is filled so quickly that a great deal of valuable time is lost through the additional journeys which have to be made to the

refuse dump. Nevertheless, until such time as a better means of disposing of the rubbish is found, it is best that the system should continue. But for repeated and regular collections, gardens would without doubt become untidy and there would be frequent complaints of nuisances from smoke and odours.

The dunes at the West Sands are still in use as a dumping ground. Hollows are being filled in and much ground is being reclaimed. In time an extensive car park will be brought into being. It is to be hoped that nothing in the shape of a promenade will be constructed and that no further buildings will be erected to deface a natural landmark of much beauty.

Fortunately, nature is hard at work endeavouring to conceal the artificial works of man, since new dunes are rapidly forming between the sands and the length of the dumping ground. Already in the short space of three years a comparatively wide strip of new bents have appeared.

Exhaustive search has been made for an inland dumping ground but none is available within reasonably short distance of the town. Such suitable quarries or hollows as exist are so far removed that much expense would be involved in their use.

104 tons of waste paper were collected. Most was baled and sold but some was burned at the old refuse depot at Cannongate.

There was a further increase in the number of standard refuse bins used by householders. Many householders have yet to provide themselves with this fitment, however. That they will do so without further action on the part of the Town Council is to be hoped.

Water Supply.

At the beginning of the year, there was a depth of 17 feet of water at the outlet tower at Cameron Reservoir. In April, the reservoir was overflowing. The lowest level of water in the course of the year was reached in August when there was 18 feet. When the year ended, the reservoir was again overflowing. A copious supply of water was therefore available at all times.

Erosion of the banks of the reservoir continues and yearly the basin is becoming more and more silted. The waterman has succeeded in pitching one short reach of the bank in admirable manner but before too great damage is done cleaning of the bed and extensive pitching of the banks should be undertaken.

Much consideration was given to the problem of the luxuriant growth of weeds in the reservoir but no satisfactory solution was found nor was helpful advice obtained from others elsewhere with a similar problem.

The average consumption of water per head of population was 67·83 gallons, 2·05 gallons more than in 1936. The consumption is high and with increasing housing developments it is likely to become higher. Fortunately, a sufficiency of water is available under circumstances of normal rainfall.

Throughout the year, the water supply is subjected to regular bacteriological examination. Samples are examined weekly and immediate attention is directed to any sign that the standard of no *bacillus coli* in 100 c.c.s, which has been maintained in the Burgh for so many years, is being departed from. Early in the year, it became evident that the water from the recently reconstructed reservoir at Lambielesham was having an adverse influence on the filtering mechanism at Pipelands. The use of this water was therefore discontinued in order that the effects of the disturbance which had taken place in the course of the works might have a chance of settling down. Since then, the water consumed in the town has been of the usual high degree of purity.

Any reference to St. Andrews Water Works would be incomplete without mention of the breakwater which was erected at Cameron Reservoir in 1935. This structure was built a short distance in front of the overflow well and has been the means of saving several millions of gallons of water annually which otherwise would have been blown to waste by strong winds over the outlet walls. The arrangement is thoroughly recommended to those who require to conserve their water supplies.

Atmospheric Conditions.

The outstanding climatic features of the year were deficient sunlight, fogs, cold and considerable snowfall.

The sunniest month was June, when there were 186·9 hours of bright sunshine. The total number of hours of bright sunshine for the year was 1,306·7—179·1 hours less than the number for the previous year which also was deficient in sunshine.

The warmest month was July and the coldest month was December.

The mean temperature for the whole year was 47 F., 0·4°F. less than the average temperature maintained over the past ten years.

The driest month was November and the wettest month was July. The total amount of rainfall for the year was 30·63 inches—5·06 inches more than in 1936. There were 121 days in which rain fell as compared with 118 in 1936.

Readings of ultra-violet radiation were taken on the tower at Kinburn. The following are the average monthly readings,

one unit being equal to twice the amount of ultra-violet light necessary to produce sunburn :—

Month.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Units	0.36	1.3	1.0	0.9	1.51	1.73	1.16	0.97	1.1	0.42	0.23	0.13

The average amount of radiation for the year was 0.9.

HOUSING CONDITIONS.

At the end of 1937, the number of houses provided by the Local Authority under the various enactments since 1919 was :—

One-roomed houses	..	..	..	..	4
Two-roomed houses	..	..	..	..	129
Three-roomed houses	..	..	..	..	324
Four-roomed houses	..	..	..	..	131
Five-roomed houses	..	..	..	..	24
Total					612

During the past year, 22 houses were erected under private enterprise. For several years, building of private houses has proceeded steadily but there are signs that numbers are declining. An important cause of this is the fact that little or no suitable ground is now available in the Burgh. A commencement has been made to develop the landward area to the west of the town and drainage and water supply services have been extended accordingly but if more ground could be built upon within the confines of the Burgh, there is little doubt but that sites would quickly be claimed. Recognising the situation, the Town Council have already taken steps towards an extension of the boundaries.

Plans for the construction of 3 private houses and for the alteration and improvement of 34 houses were reported upon. Plans for the alteration of 11 business premises and for the erection or alteration of 25 other buildings were approved by the Local Authority. Plans were also approved for the erection of a new church hall and for the extension of the local Cottage Hospital.

The construction of the 120 houses which comprise the Tenth Development of the Town Council's housing programme was completed and all were occupied by families from unfit or overcrowded houses.

A commencement was made with the erection of 82 houses—56 three-roomed, 16 four-roomed and 10 five-roomed—as the first instalment of the Eleventh Development. Largely on account of difficulties in securing labour, progress has been slow and at the end of the year none of the houses were ready for occupation.

Representations were made to the Town Council regarding 51 insanitary houses. These were considered and in due course preliminary Notices under Section 16 (1) of the Housing (Scotland) Act, 1930, were served upon the proprietors of the following number of houses informing them that their houses were unfit for human habitation and were, in the view of the Town Council, incapable of being rendered so fit at reasonable cost :—

Abbey Street	27 houses
Argyle Street	7 „
Market Street	4 „
North Street	1 „
South Street	2 „

The following number of Notices under Section 14 of the Act were also served calling upon proprietors to execute certain specified works of renovation :—

Abbey Street	6 houses
Argyle Street	4 „

Proprietors were given every opportunity of presenting their claims to the Town Council and every case was carefully considered on its merits. At the end of the year, the following was the outcome as regards houses dealt with in 1937 and others carried forward from 1936 :—

Demolition Orders had been made concerning	27 houses
Undertakings that they would not be re-occupied until they had been made fit	
were accepted concerning	66 „
Action was delayed concerning	4 „
Procedure had not been completed concerning	26 „

The 27 houses concerning which Demolition Orders were made comprise 13 properties, 3 of which are occupied by old folk whom the Town Council have agreed to leave undisturbed during their lifetime.

Since first the Town Council took action against insanitary houses in terms of the Housing Acts, various old buildings have disappeared, some to provide open spaces, others to permit of the erection of new houses or the proper reconstruction of adjoining houses. In all, 30 properties containing 75 houses have been demolished to date. These figures include the Union Street and Mnttoes Lane Slum Clearance Schemes which were carried through by the Town Council. Almost all the other properties were demolished by their owners.

The 66 houses concerning which Undertakings were accepted comprise 29 properties. Of these, 12 are to be reconstructed in a manner approved by the Town Council and 2 are to be converted for use as business premises.

Housing activities are giving rise to the appearance throughout the older parts of the town of empty buildings which will become derelict and unsightly. Already there are nearly fifty such properties. Their owners are not to reconstruct them and in view of their situation, it is unlikely that they will be acquired by others prepared to convert them into houses or business premises. The Town Council, who recognise the disadvantages involved in the conversion of any one of these buildings are rightly reluctant to expend the large amount of money involved. The likelihood, therefore, is that, until private enterprise or some extensive works of public improvement renders it necessary that these properties be removed or reconstructed, they will remain for some years to come.

On the other hand, tribute must be paid to those proprietors who have been at the expense of renovating some of the old houses. In most of them admirable work has been done and houses have been produced, completely modernised internally and externally free from any clashing contrast with the environmental features of their neighbourhood. The costs involved have been heavy but the proprietors in having preserved old appearances and maintained street lines unbroken have placed the town in their debt.

Since the commencement of the campaign against unfit houses, the Town Council have completed statutory procedure against 236 houses. 161 of these have been closed and, as has been stated, 75 have been demolished. In all, 968 persons have been removed from these insanitary premises and are now living under healthy conditions which are having an obvious beneficial effect on the rising generation.

As regards the outcome of the 10 Notices served under Section 14, the following was the state of affairs at the end of the year :—six houses had been satisfactorily improved, one house was about to be improved and three houses were deemed by their owners to be not worth the costs involved and at their request were transferred for action under Section 16.

Overcrowding.—Overcrowding was relieved in 40 houses as a result of action taken by the Town Council, viz. :—2 two-roomed houses and 1 one-roomed house belonging to private owners and 20 two-roomed, 14 three-roomed and 3 four-roomed houses belonging to the Local Authority. Procedure was therefore confined almost entirely to improving conditions in Town Council houses. The greater problem of overcrowding in privately-owned houses was not tackled.

At the end of the year, a re-survey of the position in regard to overcrowding was made and the following number of houses was found still to be overcrowded :—

One-roomed houses	..	..	..	..	9
Two-roomed houses	..	..	..	..	60
Three-roomed houses	..	..	..	..	42
Four-roomed houses	..	..	..	..	13

Total	..				124
-------	----	--	--	--	-----

Of these, the following numbers belong to the Local Authority—

One-roomed houses	..	..	..	..	5
Two-roomed houses	..	..	..	..	23
Three-roomed houses	..	..	..	..	5

Total	..				33
-------	----	--	--	--	----

The situation has therefore been improved but much remains to be done before the object of the overcrowding legislation can be achieved.

Allowing for exchange of houses between families occupying fit overcrowded houses, the following number of houses will require to be built to free the town of overcrowding :—

Three-roomed houses	..	..	..	..	35
Four-roomed houses	..	..	..	..	17
Five-roomed houses	..	..	..	..	3

Total	..				55
-------	----	--	--	--	----

Total Housing Requirements.—As has been shown, 55 houses are required to relieve overcrowding.

To accommodate families awaiting to be displaced from unfit houses already condemned or recommended for condemnation, the following numbers of houses are required :—

Two-roomed houses	..	..	..	..	54
Three-roomed houses	..	..	..	..	31
Four-roomed houses	..	..	..	..	4

Total	..				89
-------	----	--	--	--	----

It will be noted that the need for small houses predominates. Indeed, 19 of the 54 two-roomed houses will be required for families of two persons. Unfortunately, the Town Council are not now at liberty to erect houses of two rooms. Three-roomed houses are to be built. Many of these will not be occupied to minimum capacity and in many cases rooms will therefore be surplus to the requirements of the tenants. On the other hand,

the measure will go far towards preventing a recurrence of conditions of overcrowding and fortunately there is little difference between the costs of erecting two and three-roomed houses so that, while tenants may have to spend more money than need be in furnishing rooms, the ratepayers as a whole will not have suffered loss.

There still remain houses which have not yet been inspected. It is estimated that there are about 30 unfit houses from which families should be displaced.

The total number of houses required therefore to remedy unfitness and overcrowding is $55 + 89 + 30$, i.e. 174.

Decrowding operations will liberate 9 one-roomed fit houses and 16 two-roomed fit houses, the majority of which are privately owned. In the meantime, it is hoped that these will become available, to some extent at least, for the rehousing of single persons whose needs have not been allowed for in the above calculations. So that at the present juncture it would be inadvisable to subtract their number from the 174 houses estimated to be required.

Building Programme.—To meet these needs, the Town Council already have in hand, as has been indicated, the erection of 82 houses. In addition, they have also completed arrangements for the erection of 84 houses—72 three-roomed, and 12 four-roomed—as the second instalment of their Eleventh Development.

These numbers approximate closely to the number of houses estimated to be required for the Burgh and so far as can be foreseen will complete the Local Authority's building programme *under existing legislation*, which does not take into consideration the claims of ordinary applicants for houses who are not residing in unfit or overcrowded houses. That there are many such applicants can be seen from the following figures extracted from the Housing Register :—

				<i>Local Applicants.</i>
Two-roomed houses	..	..	..	99
Three-roomed houses	..	..	..	68
Four-roomed houses	..	..	..	26
				<hr/>
		Total	..	193
				<hr/>

It is not anticipated that completion of the Eleventh Development will materially reduce the number of these applicants and what is to be done for them is not at present clear. It can be stated that unless a sufficiency of houses at reasonable rentals can be produced under private enterprise or unless legislation is again

extended to assist Local Authorities to build houses to meet the normal needs of the population, the housing problem in the town will not have been solved. The matter is an important one in that so many of the applicants are newly married couples or young folk desiring to get married.

Re-Housing of Single Persons.—There are known to be 28 single persons still residing in unfit houses. During the year, their number has fallen from 44. Some were removed to the Gibson Hospital and to the Home of Rest; others found alternative accommodation for themselves in better houses and some few were inevitably elaimed by death.

Municipal houses are not available for single persons and while the Town Council has considerably agreed to refrain from disturbing aged single persons, there are instances where the presence of comparatively young persons is holding up schemes for reconstruction or obstructing removal of useless buildings.

Alive to the situation and the difficulties entailed, the Town Council have acquired a row of old houses in a central part of the town with a view to providing houses for aged couples and single persons. Plans of satisfactory type have been prepared but proposals have been delayed in the meantime since, in view of the expense involved, such schemes require very careful consideration.

Building Byelaws.

During the year, Model Building Byelaws were issued by the Department of Health. In their scope they are very comprehensive and would serve a useful purpose if adopted after amendments necessary to suit local circumstances.

No recommendations have yet been made to the Town Council concerning them since it is felt that the experience being gained in forming similar Byelaws for the landward part of the County will be of advantage to those concerned in the preparation of Byelaws for the Burgh.

Town Planning.

Definite steps have at last been taken towards the preparation of a town planning scheme for St. Andrews and its neighbourhood. The County Council have prepared an outline of the area involved and proposals of a tentative nature have been discussed. The Town Council, while agreeable that a scheme is both necessary and desirable, feel that they should have control of the future layout of the Burgh and have objected to intervention on the part of the County Council who in any event have powers of delegation, should they care to exercise them. The matter has been referred to the Department of Health for decision.

INFECTIOUS DISEASES.

Ninety-two cases of infectious diseases were notified as compared with 61 in 1936 :—

Scarlet Fever	9
Diphtheria	2
Cerebro-spinal Meningitis	1
Acute Poliomyelitis	2
Erysipelas	3
Dysentery	56
Acute Primary Pneumonia	2
Influenzal Pneumonia	8
Puerperal Pyrexia	2
Pulmonary Tuberculosis	4
Non-Pulmonary Tuberculosis	3
Total ..	92

The increased incidence was due entirely to an outbreak of *dysentery* during the last few days of the year.

Between the 10th and 20th December, some six cases of diarrhoea and vomiting occurred in St. Andrews and its neighbourhood. Symptoms were slight and no one paid particular attention to the occurrences. The interest of the Public Health Department was awakened on the 24th when thirteen cases were reported, some of them sharply ill, and all of them found by the various family doctors concerned to have consumed milk supplied by a retail dairy shop in the town. The infecting organism was proved on culture and serological examination to be *B. dysenteriae* Sonne and the infection was traced to an employee in the dairy who had fallen ill on the night of the 17th. Enquiry among the customers of the dairy brought to light several more cases not receiving medical attention.

An interesting feature of the outbreak was the fact that the infected milk could be traced back to a particular dairy farm in the County. Intensive inquiry, however, failed to unveil any evidence of any source of infection at the farm, but it was found that this milk was handled solely by the infected employee at the retail dairy after it left the farm.

From the 25th until the 29th December, fresh cases occurred in small numbers, but most of them were traceable to contact infections from relatives and friends. On the 30th, however, a sudden increase in numbers occurred and it became clear that a considerable proportion of the cases had consumed milk obtained from another County dairy. Enquiry at this farm led to the discovery of a chain of events highly interesting from the epidemiological point of view.

On the 18th December bread was delivered from a baker's van at cottar houses at the farm occupied by milkers. Attending the van was a boy who had acute diarrhoea but no marked symptoms otherwise. On the 20th, a child of one of the milkers fell ill and on the 22nd a child of another milker also sickened. On the 25th, one mother fell ill and on the 27th the other *and both continued to milk*.

All the milkers were prohibited from entering the dairy premises and no fresh cases from this source occurred. On the evening of 3rd January, however, a child, a visitor who had arrived in the town on the afternoon of 1st January, took to bed with typical symptoms. He had been in contact with no infected person but had consumed milk produced at the County dairy after the milkers had been isolated. The farm was again visited and it was ascertained that all the injunctions previously given had been scrupulously carried out. It was discovered, however, that the dairy farmer's son was suffering from abdominal pains but had no diarrhoea or other signs of the prevailing complaint. He had, unknown to his parents, entered the bottling room at the time of the afternoon milking on the 1st and had capped one or two bottles one of which was traceable to the hotel at which the child visitor resided. Evidence of a route of infection thereby became clear, but the cause of the infection was not made manifest. Further doubt was cast upon the situation on the 4th when the dairyman's son was removed to hospital and operated on for appendicitis. On the 6th, however, the lad developed all the symptoms of dysentery and his medical attendant expressed the view that the infection had been present throughout his illness, the appendix having shown no abnormal features.

From 5th to 8th January relatively few new cases occurred but from the latter date until about the 22nd a considerable number of cases occurred. No common source of infection could be traced for them. Evidence, however, had been accumulating that the disease, having assumed epidemic proportions in various populous centres throughout the County, had now become generally prevalent. February was well advanced before the last case in the Burgh occurred. One hundred and nineteen cases were notified in the Burgh during the period of the epidemic but it was estimated that about 300 persons had fallen victims to the infection.

Full bacteriological investigations were carried out in a large number of cases, and particular care was taken to have specimens examined from all those associated with the dairy infections. It is intended that the bacteriological findings will form the subject of a special communication in view of their interest.

On the whole, symptoms were of mild type, but several patients were seriously ill. Two persons died. Both, however, had been suffering previously from serious ailments.

The outbreak was instructive in view of the illustration it afforded of the highly infectious nature of the disease and of the ease with which it could be conveyed through articles of food supply.

Apart from the dysentery epidemic no matters of interest are worthy of mention in connection with the incidence of the other types of infectious diseases which were reported.

City Fever Hospital.

Twenty-three cases of infectious diseases were admitted to the City Hospital—18 from St. Andrews Burgh, 1 from Cupar Burgh and 4 from the landward part of the County. The average duration of stay of patients was 15 days.

The following Table indicates the nature of the diseases from which the patients suffered :—

	Scarlet Fever	Diph- theria	Pneu- monia	Cer. sp. Mening- gitis	Ery- sip- elas	Dy- sen- tery	Ant- Poli- omye- litis	Ton- sil- litis	Caie- ken- pox	Ulcera- tive Col- itis	Total
St. Andrews -	7	1	3	1	—	1	1	2	1	1	18
Cupar -	—	—	—	—	1	—	—	—	—	—	1
County Landward	4	—	—	—	—	—	—	—	—	—	4
	11	1	3	1	1	1	1	2	1	1	23

Two deaths occurred in hospital, both from pneumonia. Both patients were gravely ill on admission and died shortly afterwards.

The care and attention which patients receive in the hospital have long been recognised in the town. The days when it was often a matter of difficulty to arrange for the isolation of patients in hospital have long since past and now not only are parents most willing to have their children admitted but the children themselves, having heard what former patients had to tell, rarely show signs of fear or misgiving. It is pleasant also to observe the number of children who re-visit the hospital to talk to their old friend the Matron.

The Matron reports as follows on the year's work :—

“As compared with previous years, there was a marked decrease in the number of patients admitted to hospital. Five of the twenty-three patients came from outside the burgh.

“Among the twenty-three patients there were ten different types of illness. Some of the cases were seriously ill and gave much cause for anxiety. Six patients suffering from three different infections, were the highest number in hospital at one time. With the exception of one patient who provided her own nursing help, no other nursing help was called for.

"Eleven patients were admitted suffering from *Scarlet Fever*. Five of these were mild cases and suffered from no complications beyond a mild cervical adenitis in early illness. Two developed adenitis in the third week. One suffered from otitis media which had developed before admission. Three patients suffered from nephritis, and two of these suffered also from double otorrhoea. Both the latter were extremely ill.

"There was only one patient admitted suffering from *Diphtheria*. He had also a streptococcal infection and for the first week was smartly ill. Recovery was uninterrupted.

"Three patients suffered from *pneumonia*. One recovered while two died. Both deaths occurred soon after admission to hospital, complications having set in in the early stage of illness.

"A child ill at home with *Chickenpox* developed appendicitis. He was removed to the Cottage Hospital for operation and transferred to the City Hospital immediately afterwards. Peritonitis had already set in. He was extremely ill for ten days but made a good recovery and left hospital at the end of four weeks.

"An adult suffering acutely from *erysipelas* was given several injections of soluseptasine. Improvement was dramatic and at the end of ten days he left hospital completely cured.

"One case of *dysentery* was admitted. The patient had already had hospital treatment in another part of the County and was convalescing in St. Andrews when a relapse occurred. Her illness gave no cause for anxiety. She was allowed home at the end of a fortnight, all tests having proved negative.

"A patient sent in as a case of suspected dysentery was diagnosed as one of *ulcerative colitis*. He was transferred to the Cottage Hospital for treatment.

"One patient suffered from *cerebro-spinal meningitis*. Meningococci were found present in the cerebro-spinal fluid. On admission, the patient was gravely ill but after treatment with serum intrathecally and with sulphonamide preparations she made a rapid recovery, the convalescent stage being reached almost immediately after the acute stage. Her period in hospital lasted only a little over four weeks.

Diphtheria Immunisation.

"Two hundred and thirty-eight children were immunised against diphtheria during 1937. Numbers since 1927 have gradually increased. The majority of the children were sent from clinics at the James Mackenzie Institute and the Child

Welfare Centre. It is only to be expected that in the future the figures may fall since the majority of the children, who are seen periodically by the Child Welfare doctor, have already been immunised.

“ One hundred and forty-four children were Schick tested towards the end of 1936 and early in 1937. The results were given in the Report for 1936. Only 68 children have been Schick tested out of the 238 who were immunised in 1937.

“ Various alum precipitated toxoids were used during the early part of the year, but since the best results were obtained from Mulford's A.P.T. practically no other has been used except that older children received three c.c.'s of Burroughs Wellcome Toxoid antitoxin mixture.

“ Throughout the year, 411 children attended for injection and 588 visits were paid.”

MATERNITY AND CHILD WELFARE SCHEME.

Dr. Simpson, Executive Medical Officer, reports as follows on the year's work :—

“ *Births.*

“ Notified to the Health Visitor as taking place in St. Andrews, 100 : notified to the Health Visitor as taking place outside the Burgh but referred back to St. Andrews, 5 (4 Dundee Royal Infirmary, 1 Stanley, Perthshire), total, 105.

“ Of the 100 births occurring in the Burgh, 26 were attended by doctors at the Cottage Hospital, 3 were attended by doctors at Craigmount Nursing Home, 44 were attended by doctors with the maternity nurse of the Child Welfare and Nursing Association at the patient's home, and 27 were attended by the midwife of the Child Welfare and Nursing Association at the patient's homes.

“ Of the 100 births occurring in the Burgh, 4 were illegitimate, and of the 5 referred births, 1 was illegitimate—total 5.

“ There were two still births (Cottage Hospital Cases).

“ *Infantile Mortality.*

“ There were four infant deaths and one death among children in the 1-5 years age group, viz. :—

Under 1 week	..	4 (Prematurity 3, congenital heart 1).
1-4 weeks	..	0
4 weeks to 3 months	..	0
3 to 6 months	..	0
1 to 5 years	..	1 (Cardiac).

“ *Maternal Mortality*—Nil.

“ *Report under the Midwives Act.*

“ Notified to practise in the Burgh :—

Jean T. Duncan.

Isabel Macdonald.

“ Calls for medical help—6.

J. T. Duncan, St. Andrews. Breech presentation, 1 case.

” ” ” Torn perineum, 3 cases.

” ” ” Delay in 1st stage, 1 case.

I. Macdonald, St. Andrews. Breech presentation Primi-
para, 1 case.

“ *Child Welfare Work.*

“ As parents, we find it very difficult to see our own family in proper perspective, and this is specially so in the relationship between mother and child. Although a good mother is the best person to notice the first departure from normal, her tie with her baby is too close and intimate for her to assess its importance. Hence steady attendance at the Child Welfare Centre results in healthier babies and happier mothers.

“ St. Andrews is fortunate in having a Centre both well equipped and with a pleasant atmosphere. The Health Visitor and Maternity Nurse who are in attendance at the Clinics also see the babies in their own homes—a valuable arrangement, not only in establishing confidence with the mothers but also in assisting the Medical Officer with information regarding the child's home environment.

“ Many test feeds have been carried out during the year, and in many cases they have given information which led to the continuance of breast feeding when artificial feeding would otherwise have been resorted to. Every birth announcement in the newspaper means a flood of patent food advertisements descending on the new mother, and the wording of these is so convincing that it is not surprising that the percentage of naturally fed infants is decreasing. It is more than ever necessary that advice should be readily available to every class of the community. It is frequently the more leisured and educated mothers who are swayed by the arguments for artificial feeding, and can afford to try a variety of patent foods in their attempt to get their babies to thrive—but usually the results are unfortunate.

“ The Observation Nursery continued to do its good work. Many babies have been admitted as resident either for a few days or for a few weeks and all have been discharged markedly improved. This Ailing Babies Ward is probably the most important single branch of the whole Child Welfare organisation and any money spent on the extension of its usefulness would be more than justified.

Number of children on the Child Welfare Register ..	259		
Home visits under 1 year	1098		
Home visits over 1 year	310		
Expectant mothers visited by the Nursing Association's Maternity Nurse	499		
“ <i>Antenatal Clinics.</i>			
Number of patients	26		
Number of visits	26		
“ <i>Postnatal Visits</i>	1152		
“ <i>Child Welfare Clinics.</i>			
Number of sessions	102		
“ <i>Attendances.</i>			
Under 1 year	1005		
Over 1 year	364		
<i>Nursery.</i>	<i>Daily.</i>	<i>Resident.</i>	
Under 1 year ..	1	34	35
Over 1 year ..	0	5	5
			—
		Total	40
			—
“ <i>Visits.</i>			
Under 1 year ..	4 days	489 nights	493
Over 1 year ..	0	28 „	28
			—
		Total	521

“ James Mackenzie Institute.

It has recently been made compulsory for School Medical Officers to supply panel practitioners with the health records of school children when they come under the provisions of the National Health Insurance Act. In some cases, of course, the panel doctor has been the family doctor, but where this has not obtained the new arrangement will secure for the panel doctor the outline of the child's health background and help in determining both the patient's present condition and future treatment. It is of much interest to note that the aim of the new regulation reflects truly something of the aim of the James Mackenzie Institute, namely, that of the correlation of present symptoms to previous disabilities. Sir James Mackenzie, who started the work in 1919 in the interest of preventive medicine, emphasised continually the importance of the prior factor in disease and encouraged a profound observation of early symptoms.

“ The majority of the children in St. Andrews are under close observation at the Child Welfare Centre until they are two years of age. Their records are then available at the James Mackenzie Institute where they are seen by appointment three times a year until they are five years old. After five they are seen once or twice a year at the James Mackenzie Institute and are examined also at three yearly intervals by the School Medical Officer, who adds her notes to the Institute records—as do also the family doctors if they attend the child at home. Notes of any specialist services, e.g., tuberculosis, orthopaedic, ophthalmic—are also furnished. In this way a very full history of each child's environment, diet, health, disabilities, etc., is available up to date. The value of this in preventive work alone is very great, and the data in their completeness for the figures for a community must be almost unique in this country.”

“ Number of sessions at the James Mackenzie Institute 70

Average duration—2½ hours.

Number of children attending in 1937—496 :—

2-5 years..	..	..	..	..	171
Over 5 years	..	..	..	..	325
Total					496

Number of attendances in 1937—689 :—

2-5 years ..	..	..	..	..	326
Over 5 years	..	..	..	..	363
Total					689

Provision for Maternity Cases.

Two institutions are registered as Maternity Homes under the Midwives and Maternity Homes (Scotland) Act, 1927—the Memorial Cottage Hospital and Craigmount Nursing Home.

At the Memorial Cottage Hospital, there are five single bed maternity wards—one having been added during the year through rearrangement of existing accommodation. Only private cases are admitted to these wards. Necessitous cases whose home circumstances are unsatisfactory are admitted to the Duke of Kent Ward which was endowed by the citizens for the purpose. Cases are drawn not only from the Town, but also from the neighbouring parts of the County.

Arrangements, equipment and services in the hospital are highly satisfactory.

Forty-five confinements took place and 31 male infants and 14 female infants were born. There were two still births and two deaths from prematurity.

Thirteen of the deliveries were abnormal. There were eight cases of delayed labour requiring forceps delivery, four cases of Caesarian section and one case of surgical induction.

Twelve of the confinements took place in the Duke of Kent Ward. Eight male infants and 4 female infants were born.

Craigmount Nursing Home which is satisfactorily equipped for maternity purposes accommodates private patients. Eight births took place—five males and three females. All deliveries were normal.

FOOD SUPPLY.

Meat Supply.

The Public Slaughterhouse at Maryfield remains the only slaughterhouse in the Burgh.

In spite of various works of improvement, dampness continued to penetrate the east gable wall. Pointing of the entire external wall will be necessary before the defect is overcome.

Internally, the building was maintained in satisfactory condition. The cooling hall functioned admirably, there being no indications of "fired" meat even in the hottest weather. The various fittings and appliances were well tended and operated efficiently. The slaughterhouse generally complies fully with modern requirements and is likely to remain free from cause for adverse criticism for many years to come.

As distinct from other slaughterhouses in the County, there are special arrangements for meat inspection. Suspected meat is detained by the Superintendent but the premises are visited daily by a Veterinary Inspector employed by the County Council, who examines the meat supply before it is liberated for public consumption, retaining and destroying such meat as he considers to be unfit for food. The system is a fit and proper one in that the supervision of a highly important article of diet is in the hands of one specially trained in the work.

During the year 4,915 animals were slaughtered—1,247 cattle, 3,278 sheep, and 390 pigs as compared with 5,207 animals in

1936. 18,605 lbs. of meat were condemned and destroyed as unfit for human consumption as compared with 29,933 lbs. in 1937.

Milk Supply.

Only two dairy farms are situated within the town. Both were regularly inspected and were always found to be in clean condition. The dairy farmers have been at pains to bring their premises up to the standard of modern requirements and both have been in possession of the Accredited Clean Milk Producer's Certificate granted by Fife County Council to dairymen whose milk is found consistently to comply with certain defined standards of purity.

The bulk of the Town's milk supply, however, comes from dairy farms situated in the County, where supervision is maintained by the County Sanitary Inspector. While much of this milk is sold from shops, the greater part is sold by retail from vehicles in the streets.

A considerable quantity of quality milk is sold in the town. Certified milk is available from three sources—Wester Balrymonth Dairy Farm, Mount Melville Dairy Farm and Cults Dairy Farm, Springfield. Pasteurised milk can be had from the Co-operative Society shops in South Street and Market Street. There is a sufficiency of good dairymen and good dairy premises in the Burgh and in its neighbourhood to supply every household with tubercle free milk, and it is the aim of the Public Health Department in conjunction with the reorganised Veterinary Service in the County to achieve this object. Every encouragement will be given to suitable dairymen to build up herds which are free from infections communicable to human beings and to produce as safe and pure a milk as can possibly be obtained.

For several years in these Reports, attention has been directed to the weakness of legislation directed towards the eradication of tuberculosis among cattle. In 1937 a highly important enactment was passed by the Government and the way is now clear towards the elimination, in time, of tuberculosis in dairy herds. Under the Agricultural Act, 1937, a centralised veterinary service has been created and a large scale and comprehensive campaign for the eradication of animal diseases has been initiated. Powers to seize and effectively dispose of any animal affected or suspected of being affected with disease have been greatly strengthened and statutory loopholes whereby milk from an obviously diseased cow could be sold to the public have been abolished. The measure is a welcome addition to public health legislation.

SALE OF FOOD AND DRUGS ACTS.

Twenty-eight official samples of foodstuffs including beer, cocoa, flour, rice, sago, cream of tartar, oatmeal, sugar and sausages were submitted for analysis as to their quality. One sample of whisky was found to be adulterated and the seller was fined one pound.

Twenty-eight official samples of milk were collected for testing, twenty-seven of which were found to be genuine. One was found to be deficient in non-fatty solids. The vendor, however, was found not guilty.

Ten test samples of foodstuffs were submitted for analysis and all were found to be genuine.

FACTORIES AND WORKSHOPS ACTS.

Forty visits were paid to factories, workshops and workplaces and three written notices were served on proprietors drawing attention to sanitary defects. In each case a satisfactory remedy was applied. No serious criticisms from the health point of view can be levelled against the conditions under which people are employed in the town.

In the course of the year new legislation was introduced to bring up to date and strengthen previous legislation controlling conditions and circumstances of employment so far as concerns the environment of workers. The new Act comes into force on 1st July, 1938, and reference to its terms will be made in the Report for that year.

AIR RAID PRECAUTIONS.

The health services of the community have always been directed towards the promotion of a happier life of fuller capacity for the citizens. It is therefore all the more disquieting to know that there has been added to the work of the Public Health Department the responsibility of organising measures for the protection and succour of the population threatened with catastrophe from hostile aircraft. It passes all comprehension that in these days of enlightenment the peoples of Europe, still acutely conscious of the horrors of 1914-18, should, with more or less dumb resignation, commence once again to prepare themselves against destruction. Yet it would seem that the need has become inevitably necessary, as if the world were becoming afflicted with a species of mental blindness.

Considerations of this nature are perhaps not for discussion in these pages but without doubt they are troubling the minds of all thinking people. Nevertheless, so long as the threat of war continues it becomes the duty of all eligible citizens to prepare themselves to be useful in the event of calamity.

A scheme for casualty services is being prepared and in due course will be made public. In the meantime, it cannot be too strongly emphasised that, while it is well that people should have a knowledge of war gases and their effects, it is of much greater importance that they should have a knowledge of the principles of first aid.

*To the Honourable, the Department of Health for Scotland, and the
Provost, Magistrates, and Councillors of the Royal Burgh
of St. Andrews.*

Gentlemen,

I have the honour to submit to you my Eighth Annual Report upon the General Sanitary Conditions of the Burgh during the year 1937.

The Report has been prepared in accordance with the instructions of the Department of Health.

I have the honour to remain,

Gentlemen,

Your obedient Servant,

ALEXANDER H. STEELE.

Sanitary Inspector's Office,
Church Square,
St. Andrews,
8th June, 1938.

SANITARY INSPECTOR'S REPORT, 1937.

GENERAL STATISTICS.

Rateable Value of Burgh	£114,333
Estimated Population .. .. .	.. 8,725
Area of Burgh (to High Water Mark and including Links)	1040·2 acres
Area of Burgh (below High Water Mark to Low Water Mark)	1171·6 acres
Total Area of Burgh (to Low Water Mark and including Links)	2211·8 acres
Area of Burgh to High Water Mark excluding Links	725·3 acres
<i>Wards (approximate area, etc.)—</i>	

	<i>Area to L.W.M.</i>	<i>Area to H.W.M.</i>	<i>Rateable Value.</i>
Ward 1	291·20 acres.	229·00 acres.	£34,142
Ward 2	154·60 acres.	80·00 acres.	£38,660
Ward 3 (including Links, 314·86 acres)	1766·00 acres.	731·20 acres.	£42,207

Mileage of Roads and Streets.

Class I. Roads	3·180 miles
Class II. Roads	0·940 miles
Unclassified Roads	7·640 miles
Public Lanes and Walks	4·834 miles
	<hr/>
	16·594 miles
Private Streets	1·068 miles
Private Lanes	0·214 miles
	<hr/>
	1·282 miles
Total	<hr/> 17·876 miles <hr/>

Public Parks, Recreation Grounds, Playing Fields, etc.

The Links (Golf Courses, etc.)	314·360 acres
Bruee Embankment (Putting Greens, etc.)	5·400 „
Bassaguard (Children's Playing Fields)	1·000 „
Coekshaugh Park	5·353 „
East Bents (Putting Greens)	2·000 „
Kinburn Park (Tennis Courts, Putting Greens, etc.)	6·682 „
Woodburn (Children's Playing Field)	2·834 „
	<hr/>
	338·129 „
East and West Sands to L.W.M. (including Rocks, Eden Mouth, etc.)	1171·600 „
Total	<hr/> 1509·729 „ <hr/>

METEOROLOGICAL OBSERVATIONS.

Temperatures.

During 1937 the coldest nights were December 13th, 20th and 21st when the lowest minimum reading, 20 degrees Fahr., was recorded : the coldest day was December 19th, when the lowest maximum reading was 33 degrees Fahr. The warmest day was July 31st, when the reading of the highest maximum was 77 degrees Fahr., and the highest minimum during the night was on July 3rd, when 60 degrees Fahr. was recorded.

Sunshine.

The year 1937 had 29 per cent. of the possible bright sunshine, with a daily mean of 3·58 hours.

Leuchars took first place in Scotland with a total of 1,363·1 hours of bright sunshine, St. Andrews being fifth with a total of 1,306·7 hours.

Leuchars	..	..	1363·1 hours.
Arbroath	..	..	1353·0 "
Montrose	..	..	1330·3 "
Ayr ..	..	..	1308·0 "
St. Andrews	..	..	1306·7 "
Edinburgh	..	..	1306·4 "
Prestwick	..	..	1286·9 "
Carnoustie	..	..	1275·9 "
Dundee	..	..	1246·4 "
Aberdeen	..	..	1237·4 "
Perth	..	..	1207·8 "
Dunoon	..	..	1192·7 "

The following table gives the total hours of Bright Sunshine in St. Andrews for the past six years :—

1932.	1933.	1934.	1935.	1936.	1937.
1397·3	1539·9	1558·8	1493·2	1484·8	1306·7

The following table gives the Daily Mean Hours of Bright Sunshine and the Total Hours of Bright Sunshine, at St. Andrews, for each month during 1937 :—

Month.	Daily Mean Hours of Bright Sunshine.		Total Hours of Bright Sunshine.
January,	1·56		48·4
February,	3·66		102·5
March,	2·93		90·7
April,	3·31		99·4
May,	5·76		178·7
June,	6·23		186·9
July,	4·30		133·4
August,	4·57		141·6
September,	5·00		150·1
October,	2·39		74·1
November,	1·93		58·0
December,	1·38		42·9
Average		3·58	Total 1306·7

	1937.	1936.	1935.
Total Sunshine for year	1306.7 hrs.	1485.8 hrs.	1493.2 hrs.
Most in one month	186.9 hrs. (June)	245.6 hrs. (June)	249.3 hrs. (July)
Least in one month	42.9 hrs. (Dec.)	54.8 hrs. (Dec.)	62.1 hrs. (Dec.)
Percentage of possible sunshine for year	29	33	33

	Rainfall.		
	1937.	1936.	1935.
Total rainfall for year	30.63 ins.	25.58 ins.	25.79 ins.
Heaviest fall in one month	3.63 ins. (July)	4.44 ins. (July)	3.96 ins. (Nov.)
Driest Month	0.31 ins. (Nov.)	0.53 ins. (April)	0.78 ins. (July)
Heaviest Fall on one day	1.46 ins. (June 14)	0.95 ins. (Jan. 25)	1.49 ins. (Nov. 17)
No. of Rainy Days	121	118	124

DETAIL OF RAINFALL.

Month.	No. of days with 1 m.m. or more.	Bruce Embankment.	Pipelands Filters.	Cameron Reservoir.
January, ..	16	3.41	2.91	3.20
February, ..	13	2.82	3.19	3.81
March, ..	12	2.39	2.28	2.89
April, ..	15	2.13	1.89	1.98
May, ..	8	2.56	2.83	2.74
June, ..	9	2.39	1.92	2.09
July, ..	13	3.63	3.41	3.84
August, ..	11	3.28	3.60	5.00
September, ..	—	1.45	1.60	1.97
October, ..	10	3.04	3.92	4.56
November, ..	3	0.31	0.36	0.48
December, ..	11	3.22	3.58	3.95
Totals, ..	121	30.63	31.49	36.51

The following table gives the detail of Rainfall, Sunshine and Temperatures.

DETAILS OF RAINFALL, SUNSHINE AND TEMPERATURES.

Month.	Mean Temperature.	Rainfall.		Precipitation.	Sunshine.		Temperature.		
		Total in inches.	Most in a day in in.		Daily Mean.	Percent. of Possible.	Absolute Max.	Date.	Minimum.
January	40.3	3.41	0.47	16	1.56	21	54	22	30
February,	38.1	2.82	0.63	13	3.66	39	51	4, 14	24
March,	36.0	2.39	0.57	12	2.93	25	50	24	16
April	45.4	2.13	0.33	15	3.31	23	67	30	26
May	50.4	2.56	0.81	8	5.76	35	73	29	6
June,	55.4	2.59	1.46	9	6.23	36	73	25	2, 19
July,	58.4	3.63	0.87	13	4.30	25	77	31	31
August,	58.1	3.28	0.87	11	4.57	30	72	6	27
September,	54.1	1.45	0.31	—	5.00	39	68	27	26
October,	48.7	3.04	0.78	10	2.39	23	62	19	27, 28
November,	42.1	0.31	0.67	3	1.93	24	56	5	21
December,	36.9	3.22	1.00	11	1.38	20	53	24	13, 20, 21
Averages and Totals	46.9	30.63	0.68	121	3.58	29	63	—	31.5

WATER SUPPLY.

The water supply to the Burgh is obtained from reservoirs outwith the Burgh Boundary. There are three reservoirs, the largest, Cameron, is situated about five miles from St. Andrews. The next in size is Lambielesham, which is about three miles distant from the Burgh, while the smallest reservoir, Cairnsmill, is situated $1\frac{1}{2}$ miles from the town.

The main supply is obtained from Cameron reservoir, which has a holding capacity of 222,000,000 gallons of water, and the area of the reservoir is 105 acres, and is situated 474.0 feet above Ordnance Datum. Lambielesham reservoir has a capacity of 12,000,000 gallons, and Cairnsmill—which is now used only for watering purposes on the Links—has a holding capacity of 3,750,000 gallons. The total return of the readings is therefore 237,750,000 gallons.

Cameron Reservoir has a catchment area of 1,456 acres—of which, approximately 50 per cent. is owned and controlled by the Town Council—and the catchment area of Lambielesham and Cairnsmill together extends to the same area.

In these reservoirs precipitation of matter in suspension takes place before the water is conveyed to the filters.

The unfiltered water from the reservoirs is conveyed to the filter works, at Pipeland, by twin cast-iron mains, branching inside the works into one 12-in. main which carries the water into the control house.

In this Control House there are copper-wire cloth screens—16 ribbon mesh wires to 1 lineal inch—through which the water first passes. These screens intercept any solid matter which may have been carried through the mains from the reservoirs. The water is then distributed by 4 separate 6-in. pipes to 4 Primary Filters.

The Primary Filters are each divided into 3 compartments with a total area of 4,000 sq. ft. The total filtering area of the 4 No. 3 compartments is 2,000 sq. ft.

The water passes downwards through each compartment in turn, to a small collecting chamber, where it is drawn off over a telescopic outlet. A ball-valve on the inlet maintains a constant depth of water in the filter, and the filtering head is regulated by the telescopic outlet.

As the size of the material in each compartment is decreased, it will be noted that the area of the compartment is increased, so that the free downward flow of the water is not impeded. The floor drainage of the compartments is by terra-cotta stool tiles, and each compartment has an independent scour.

On passing the primary filters the water is collected in an open "balance tank" of 50,000 gallons capacity placed between the Primary and Secondary Filters. It is constructed throughout of reinforced concrete, 8-in. thick on the floor, and from 9 to 6 inches thick on the walls. To allow for cleaning and repairing the tank is in two compartments.

The water is drawn off the balance tank to 2 small concrete wells and from there it is distributed to the 12 Secondary Filters. On the inlet of each control well there is a 10-in. ball-valve which regulates the supply and maintains a constant depth of water in the Secondary Filters.

The water enters each Secondary Filter over a trumpet bend, and, after passing downwards through the filtering media, is collected in a small chamber, and drawn off over a telescopic outlet. The floor drainage of the Secondary Filters is by herring-boned fireclay pipes, with a 6-in. main drain and 4-in. branch drains.

The water after Secondary filtration is collected into a 12-in. main and delivered into Clear Water Wells.

The old underground well is of mass concrete and has a capacity of 160,000 gallons, the depth of water at Top Water Level being 10 feet. The new well, alongside, is of 150,000 gallons capacity giving a total storage at Upper Pipeland of 310,000 gallons. To this has to be added a storage of 175,000 gallons, stored in the wells at Lower Pipeland, making a total storage of filtered water 485,000 gallons.

The new clear water well at Upper Pipeland is constructed of reinforced concrete 6-in. thick on the floor, and the walls are from 8 to 4 inches thick, and the roof is of concrete 4-in. thick, strengthened by wall and roof beams.

There is a 10-in. equalising pipe connecting the two wells, and either well can be emptied for cleaning or repair.

The draw off from the wells to the town is by a 10-inch main and a 6-inch main to maintain the wells at Lower Pipeland, the flow of the water is measured by "Venturi" Recorders.

There is in use a 10-in. and a 6-in. "Venturi" tube and Recorder measuring the water passed to the town and to the wells at Lower Pipeland.

Then "Venturi" Recorders give the total consumpt by dial readings, and at the same time mark on a weekly chart the flow in gallons per hour at all times of the day and night.

The whole filtering system, from the Clear Water Wells to the Control House, has been made practically self-regulating, by the use of ball and float valves.

The materials in the filters are washed when necessary, the sand being washed by two "Peebles" sand washers. Each washer is capable of washing 4 tons of sand per hour, working with a pressure of 5 lbs. per sq. inch.

The present daily consumpt, during the busy season, averages 725,000 gallons.

The Area of Supply is approximately 930 acres : 920 acres within the Burgh and 10 acres outwith the Burgh. The population served is approximately 10,075 being 10,000 within the Burgh and 75 outwith.

The Primary Filters are divided into three compartments with a filtering area of 1,000 sq. ft. each. The compartments are graded as follows :—

No. 1 compartment	has an area of	200 sq. ft.
No. 2	„ „	300 sq. ft.
No. 3	„ „	500 sq. ft.
		<hr/>
		1000 sq. ft.
		<hr/>

The filtering media is as follows :—

No. 1 Compartment.

18 in.— $\frac{3}{4}$ in. to $\frac{1}{2}$ -in. whin chips.
 2-in. thick perforated tiles.
 6-in. $\frac{3}{4}$ -in. to $\frac{1}{2}$ -in. gravel.

No. 2 Compartment.

4-in.— $\frac{3}{4}$ -in. to $\frac{1}{2}$ -in. whin chips.
 24-in.— $\frac{1}{2}$ -in. to $\frac{3}{8}$ -in. gravel.

No. 3 Compartment.

4-in.— $\frac{3}{4}$ -in. to $\frac{1}{2}$ -in. whin chips.
 6-in.— $\frac{1}{2}$ -in. to $\frac{3}{8}$ -in. gravel.
 24-in.— $\frac{1}{2}$ -in. to $\frac{3}{8}$ -in. Arran Sand.

There are 12 Secondary Filters, four each of 980 sq. ft. and eight each of 1,000 sq. ft., or a total filtering area of 15,840 sq. ft. capable of dealing with over 1,000,000 gallons of water per day.

The filtering media of the 12 Secondary Filters is as follows :—

14-in.—2-in. to $1\frac{1}{2}$ -in. whin metal.
 6-in.— $1\frac{1}{2}$ -in. to $\frac{1}{2}$ -in. whin metal.
 4-in.— $\frac{3}{8}$ -in. to $\frac{1}{8}$ -in. Gravel.
 2-in. thick perforated tiles.
 24-in. Arran Sand.

4 ft. 2-in. Total Depth.

From the intake at Cameron there are duplicate cast-iron Trunk Mains of 12-in. and 10-in.

The 12-in. main is of this diameter for a distance of 3,053 yards, thereafter it is a 9-in. diameter cast-iron pipe to the filters, a distance of 3,689 yards or a total length of 7,347 yards.

The two mains therefore measure 14,080 yards or a total length of 8 miles.

Cross connections are provided between the two mains, at Priorletham Road, and at Longrow, near the railway so that sections of the main can be cut out for repairs, etc.

The distribution mains within the Burgh extend to an approximate length of 18·91 miles, and are of the following diameters and lengths :—

10-inch diameter mains		2,216 yards.	
8	„ „	1,550	„
7	„ „	2,520	„
6	„ „	5,257	„
5	„ „	1,457	„
4½	„ „	1,527	„
4	„ „	3,950	„
3	„ „	10,027	„
2½	„ „	2,723	„
2	„ „	2,053	„
		<hr/>	
		33,280	„
		<hr/>	

The total mileage of all the water mains is 26·91 miles :—

8·0 miles of Trunk Mains.

18·91 miles of Distribution Mains.

26·91

The supply of water to the Burgh was adequate during the year, and the quality was very good. As will be seen from the Annual Report for 1936, Cameron Reservoir had a depth of 17 feet at the beginning of the year and this gradually increased until in April the Reservoir was full, and overflowing 1 inch. The Top Water Level of 20 feet varied only slightly during the year, the lowest level being 18 feet for a few days in August, and the year ended with the Reservoir being full and overflowing 1 inch.

Lambieletham Reservoir was used as a settling Reservoir for the whole year, beginning with a depth of 36 feet 7 inches. During the year this depth gradually increased until May, when Top Water Level of 40 feet was attained and maintained until the last week of December. At the close of the year the depth recorded was 38 feet, 4 inches. The lowest depth during the whole year was 35 feet on the 4th and 5th January.

The average consumpt of water per head of the population during the year was 67·83 gallons per day, compared with 65·78 gallons per day during 1936, and 64·77 gallons per day during 1935, or an increased consumption of 2·05 gallons per day over 1936, and 4·06 gallons per day over the consumpt per day for 1935.

One thousand, one hundred and ten yards of new water main were laid during the year as follows :—

Lamond Drive, Housing Scheme (10th Development) 6-inch diameter main	33 yards
Nelson Street (Extension) 3-inch diameter main	47 „
Lamond Drive Housing Scheme (11th Development) 3-inch diameter main	378 „
Bowling Green Terrace to Lamond Drive (Extension) 4-inch diameter main	250 „
Low Strathkinness Road (Extension) 3-inch diameter main	40 „
High Strathkinness Road (Extension) 3-inch diameter main	362 „
Total	1110 „

Thirty-three new connections were made to the water mains during the year, these being as follows :—

7 connections of $\frac{1}{2}$ -inch bore.			
25	„	$\frac{3}{4}$	„ „
1	„	1	„ „
<hr/>			
Total	33		
<hr/>			

During the year 37 notices were issued by the Water Department in respect of waste water and defective fittings.

Two samples of unfiltered water were taken and submitted to the Public Analyst for examination, with the following results—

Laboratory of City Analyst,
140 Perth Road,
Dundee, 7th October, 1937.

Chemical Examination of a sample of water received on 5th October, 1937, from R. F. Buick, Esq., C.E., Burgh Engineer, St. Andrews, marked as follows:—"Outlet Tower, Cameron Reservoir."

One Million Parts of this Water Yield.

Free Ammonia	..	..	..	..	·046
Albuminoid Ammonia	..	..	..	..	·296
Carbonate of Lime, etc.	..	..	..	..	150·00
Chlorine	..	..	..	..	17·00
Nitrogen, as Nitrates	..	..	..	..	0·10
Nitrites	..	..	..	..	none
Hardness, in Clark's Degrees	..	..	..	..	10½
Lead, or other Poisonous Metals	..	..	..	..	none

Remarks.

This water has a yellowish tinge of colour (Red ·8, Yellow 3·0 Lovibond's Standard Scale) and contains some finely divided sedimentary matter mostly of vegetable origin. On incubation at blood heat it had a slight vegetable odour. A Sedgwick Rafter Plankton revealed a number of ordinary diatoms and some dead fragments of Cyanophyceae, probably *Cylindrospermum*.

The pH value of 9·5 denotes an alkaline ionic concentration. The yields of Ammonias are somewhat high but they appear to be from a harmless source as the presumptive test for *B. Coli* was negative in at least 10 cubic centimetres of the water. These figures are also reflected in the oxygen absorbed from N/80 Permanganate: the "4 hours test" was 0·275 part per 100,000, representing more than the usual amount of dissolved and readily oxidisable organic matter.

Nitrates are present only in traces: the amount does not raise any suspicion of "previous sewage contamination." Saline material is high rendering the water slightly hard and of noticeable soap destroying power.

In my opinion the water is safe for drinking and general domestic purposes, but there is a tendency for it to have a dull appearance.

ANDREW DARGIE, B.Sc., A.I.C.

Public Analyst for St. Andrews.

Laboratory of City Analyst,
140 Perth Road,
Dundee, 7th October, 1937.

Chemical Examination of a Sample of Water received on 5th October, 1937, from R. F. Buick, Esq., C.E., Burgh Engineer, St. Andrews, marked as follows :—"Outlet Tower—Lambie-letham Reservoir."

One Million Parts of this Water Yield.

Free Ammonia	..	..	..	..	0.50
Albuminoid Ammonia	..	..	..	..	0.230
Carbonate of Lime, etc.	..	..	..	..	210.00
Chlorine	..	..	..	..	20.00
Nitrogen, as Nitrates	..	..	..	..	0.45
Nitrites	..	..	..	..	none
Hardness, in Clark's Degrees	..	..	..	..	14 $\frac{3}{4}$
Lead, or other Poisonous Metals	..	..	..	..	none

Remarks.

This water has a slight yellowish tinge of colour (Red 4, Yellow 1.8 Lovibond's Standard Scale) and contains little sedimentary material. On incubation it has a slight vegetable odour. A Sedgwick Rafter Plankton revealed a number of ordinary diatoms including *Asterionella*, *Cyclotella*, and some *pleurococcus* of the order *Palmellaceae*, which are frequently met with in waters.

The pH value of 9.0 represents an alkaline ionic concentration. The yields of Ammonias are above the average and indicate a fair amount of nitrogenous organic matter. Nitrates are present only in traces; the amount does not raise any suspicion of "previous sewage contamination." The presumptive test for *B. Coli* was negative in 10 cubic centimetres, the largest quantity of water tested. The inference from these is, that the high yields of Ammonias are not derived from an animal source and are therefore comparatively harmless.

Saline material is high rendering the water hard and somewhat inconvenient in washing operations. The oxygen absorbed from N/80 Permanganate "4 hours test" is 0.173 part per 100,000 denoting a fairly high but not excessive amount of readily oxidisable matter.

In my opinion the water is fit for drinking and general domestic purposes.

ANDREW DARGIE, B.Sc., A.I.C.,
Public Analyst for St. Andrews.

The following tables give the Abstract of Monthly Consumpt of water, filtered at Pipeland, and the Abstract of Consumpt of Water Filtered at Pipeland for the years 1913-1937 :—

ST. ANDREWS WATER.

Abstract of Monthly Consumpt of Water Filtered at Pipeland 1937

Date 1937.	Upper Wells (10' Meter)	Lower Wells. (6" Meter)	Total Consumpt Gallons.	Pipeland. Ins.	Rainfall Cameron Ins.	Met. Station Ins.
January,	19,040,000	844,000	19,884,000	2.91	3.20	3.41
February,	17,760,000	994,000	18,754,000	3.19	3.81	2.82
March,	19,540,000	1,028,000	20,568,000	2.28	2.89	2.39
April	18,880,000	1,261,000	20,141,000	1.89	1.98	2.13
May,	19,480,000	1,349,000	20,829,000	2.83	2.74	2.56
June,	19,180,000	1,376,000	20,556,000	1.92	2.09	2.39
July,	20,550,000	2,304,000	22,854,000	3.41	3.84	3.63
August,	20,430,000	2,141,000	22,571,000	3.60	5.00	3.28
September,	18,900,000	1,400,000	20,300,000	1.60	1.97	1.45
October,	19,150,000	1,524,000	20,674,000	3.92	4.56	3.04
November,	18,200,000	1,553,000	19,753,000	0.36	0.48	0.31
December,	19,140,000	1,559,000	20,699,000	3.58	3.95	3.22
	230,250,000	17,333,000	247,583,000	31.49	36.51	30.63

Average consumpt per month, ..	20,631,916	gallons
" " " per week, ..	4,761,211	"
" " " per day, ..	678,309	"
" " " per head, per day,	67.83	"

ST. ANDREWS WATER.
Abstract of Consumpt of Water Filtered at Pipeland Filters.
Years 1913-1937.

Year.	Total Consumpt.	Average per day.	Average per month.	Average per head.	Rainfall (Ameron. Ins.	Pipeland. Ins.	Met. Stat. Ins.	Rain Days.
1913	141,001,700	386,281.75	11,750,141	48.28	..	24.38	..	172
1914	139,544,700	382,314.24	11,328,725	47.79	..	21.10	..	180
1915	132,682,500	418,308.22	12,723,541	52.28	..	32.68	..	185
1916	157,959,700	432,766.30	13,163,308	54.09	43.75	38.85	..	204
1917	155,841,200	426,962.16	12,986,736	53.37	24.51	20.94	..	166
1918	156,302,200	428,252.60	13,026,016	53.53	26.81	24.92	..	177
1919	152,451,400	417,675.06	12,704,283	32.22	30.16	26.52	..	172
1920	161,043,600	440,009.83	13,420,300	55.00	30.02	26.91	..	185
1921	157,227,000	429,581.96	13,100,200	47.73	24.42	22.00	..	156
1922	161,520,900	441,040.71	13,460,075	47.42	24.40	27.23	..	181
1923	181,272,700	496,637.53	15,106,058	52.83	28.96	27.23	..	203
1924	178,209,800	486,912.02	14,850,816	51.25	34.10	31.85	..	185
1925	216,163,400	592,228.42	18,013,616	62.33	30.34	27.05	..	154
1926	253,879,300	695,556.98	21,156,608	69.55	37.13	34.76	..	190
1927	229,988,500	600,106.43	19,165,700	63.00	33.58	31.61	..	188
1928	220,091,900	601,353.18	18,341,200	60.13	37.76	35.36	..	203
1929	229,477,830	628,766.38	19,123,152	62.87	28.97	24.64	..	150
1930	240,002,280	657,544.90	20,000,190	65.75	35.45	32.43	..	177
1931	261,729,352	717,066.72	21,810,779	71.70	36.17	30.75	..	159
1932	264,845,000	725,602.74	22,070,416	72.56	31.88	27.13	..	178
1933	242,618,000	664,706.85	20,218,166	66.47	23.00	18.05	19.07	150
1934	224,282,000	614,471.00	18,690,167	61.45	36.33	30.02	27.85	167
1935	232,763,000	637,707.00	19,396,917	63.77	32.85	27.76	25.79	167
1936	240,116,000	657,852.00	20,009,666	65.78	32.30	27.24	25.57	180
1937	247,583,000	678,309.00	20,631,916	67.83	36.51	31.49	30.63	176

DRAINAGE.

The sewerage system in operation within the Burgh is that known as the " Combined " system, whereby the whole waste water from dwellings, surface water from streets, and all surface water drains are collected and carried together.

The drainage area of the Burgh extends to a little over 500 acres and is divided into two areas, known as the Northern and Southern Areas.

To serve these areas, two separate outfall sewers are provided, the sewage from the Northern Area being discharged into the sea, through a 20-in. diameter C.I. pipe at the Bruce Embankment, and the sewage from the Southern Area discharging into the sea, through a 21-in. diameter C.I. pipe, at the Harbour.

In previous years numerous complaints were made, as to the fouling of the foreshore at the West Sands, with faecal matter, and in order to combat this nuisance two screens are now in use at each of the outfalls.

One screen has a basket arrangement which intercepts all the faecal matter and paper, the other screen is erected on the up-side of this and is known as a lock screen.

Before the basket screen is raised, the lock screen is dropped into position to prevent the solids, etc., from passing to the outfall. The application of two strong jets of water under pressure breaks up and liquifies all faecal matter caught in the basket screen, and this has the desired effect as no complaints are now received about the condition of the beaches.

The drainage from low lying properties at Woodburn are connected to a low level Sewer and Pumping Station.

The pumping plant takes the drainage from Woodburn Laundry and the dwellinghouses which are situated below the level of the main sewer in St. Mary's Street.

The sewage is conveyed in a 9-in. fireclay pipe to a sump, of 700 gallons capacity in the Pumping Station, and pumped through a 4-in. cast-iron main to a manhole on the main sewer.

The sewage is raised by 2 Vertical Spindle Sewage Pumps, directly coupled to 2 B.H.P. Vertical Spindle Electric Motors.

Each pump has a rated capacity of 100 gallons per minute, and is capable of passing any solids which can enter the suction pipe, as well as rags, cotton waste, and fibrous material.

The action of starting and stopping the pumps is automatic and depends on the rise and fall of the level of the sewage in the sump. As a general rule one pump only is required to deal with the sewage, but in event of excessive flow, or chokage, the second pump comes into action.

SEWAGE DISPOSAL.

The sewage system has functioned satisfactorily during the year, and has given no cause for adverse criticism.

The work of maintenance and repairs to the system are executed by the Burgh Engineer, and these have been well attended to during the year.

Flooding of basements took place at Gibson Place towards the end of the year, but no fault was discovered in the main sewers, and the flooding was caused by defective back-flap valves and rain water from the roofs.

Nine hundred and seventy-seven yards of new sewer was laid during the year, as follows :—

Lamond Drive, Housing Scheme (10th Development) Extension, 9-inch diameter sewer ..	33 yards
Bowling Green Terrace to Lamond Drive, 15-inch diameter sewer	140 „
Bowling Green Terrace to Lamond Drive, 12-inch diameter sewer	194 „
Strathkinness Low Road (Extension), 9-inch diameter sewer	40 „
Strathkinness High Road, 9-inch diameter sewer ..	345 „
Lamond Drive, Housing Scheme (11th Development), 9-inch diameter sewer	225 „
Total ..	977 „

During the year the Pipeland Burn was diverted and led by a 27-in. diameter concrete pipe along Pipeland Road and Bowling Green Terrace to the Kinness Burn. The old bed of the stream was closed in, and a 10-inch tile pipe laid to deal with surface water and any existing tile drains.

A new inlet and outlet was provided for filling and emptying the Skating Pond. The length of the pipe from the outlet to the intake at Lamond Drive is 400 lineal yards.

Ten new connections were made to the sewers during the year, these being as follows :—

Hepburn Gardens	2
Greyfriars Garden	1
Park Street	2
Abbey Walk	1
Nelson Street	3
Pipeland Road	1
Total ..	10

There are 26,787 yards or 15.22 miles of Sewers within the Burgh, of the following diameters and lengths, and constructed of Brick, Concrete, Steel Tubes, Cast-Iron, and Fireclay :—

30-inch by 18-inch Egg-shaped Brick built sewer	..	..	1327 yards
30-inch Diameter Sewer	..	..	660 "
24	"	..	270 "
21	"	..	653 "
20	"	..	463 "
18	"	..	427 "
15	"	..	5364 "
12	"	..	6020 "
10	"	..	50 "
9	"	..	8393 "
8	"	..	1703 "
7	"	..	80 "
6	"	..	1324 "
4	"	..	53 "
			<hr/>
			26,787 "
			<hr/>

In addition to the above there are 697 yards of sewers of unknown dimensions.

There are also 2,824 yards or 1.60 miles of Surface Water Drains, constructed of Concrete and Fireclay Pipes :—

30-inch diameter Concrete drain	..	607 yards
18-inch " Fireclay drain	..	460 "
12-inch " " "	..	297 "
9 " " " "	..	450 "
8 " " " "	..	873 "
6 " " " "	..	137 "
		<hr/>
		2824 "
		<hr/>

CLEANSING AND REFUSE DISPOSAL.

For the purposes of cleansing and scavenging the Burgh is divided into 10 districts, and on each district one scavenger is constantly employed. The duties include the cleansing of streets, water channels, and collection of house refuse.

Tipping of refuse was continued throughout the year, at the West sands, and no complaints were received regarding the methods employed.

The Chief Inspector of Public Cleansing from the Department of Health visited St. Andrews during the year, and visited all the dumps which have been used during the past few years.

The special collection, twice weekly, of paper from shops and houses was continued throughout the year, and as the demand for waste paper has been good, a fair amount of revenue was derived from this source. So long as no additional staff has to be employed, the sale of paper should be continued as it overcomes the objections from the burning.

The question of the fouling of footpaths by dogs proceeded a step further during the year, when the Town Council resolved to make application for a Bye-law, and this has now been confirmed, and is applicable within the Burgh. The Bye-law is in the following terms :—

The Provost, Magistrates and Councillors of the Burgh of St. Andrews, in virtue of the powers conferred upon them by the Burgh Police (Scotland) Acts, 1892 to 1903, and the Town Councils (Scotland) Act, 1900, and, in particular, Section 316a (1) of the Burgh Police (Scotland) Act, 1892, at the Meeting of the Town Council held on the Fifth day of November, Nineteen hundred and thirty-seven.

Bye-law.

Nuisance by Dogs on Footways.

Every person in charge of a dog in any street, and having the dog on a lead, who shall allow or permit such dog to deposit its excrement upon the footway shall be liable to a penalty not exceeding Forty Shillings.

ST. ANDREWS, *5th November 1937.* The foregoing Bye-law made and enacted by the Provost, Magistrates and Councillors of the Burgh of St. Andrews, at the Meeting of the Town Council held of this date.

JOHN REID, *Provost.*

ALEXANDER R. C. BOWIE, *Magistrate.*

D. FRASER, *Magistrate.*

J. CARGILL CANTLEY, *Town Clerk.*

The extension of the occupied areas of the Burgh continues, and during the year, 345 lineal yards of new street was completed. This section of road was at Diamond Drive, Housing Scheme (10th Development), westwards from Boase Avenue, and consists of a 40 foot roadway between fences, with two 6 feet footpaths, the whole being laid in Tarmac.

PUBLIC CONVENIENCES.

The public conveniences within the Burgh are well maintained. They are washed out daily, and no complaints were made regarding their condition.

The conveniences in the Burgh are as under :—

Ladies' Waiting Room, Church Square.—5 W.C.'s in cubicles with coin-operated locks. 1 Wash-hand basin in cubicle, with coin-operated lock. 1 public wash-hand basin.

Gentlemen's Conveniences, Church Square.—4 W.C.'s in cubicles with coin-operated locks ; a nine-stalled urinal, and a public wash-hand basin.

Ladies' Waiting Room, Bruce Embankment.—7 W.C.'s in cubicles ; 1 wash-hand basin in cubicles ; 4 public wash-hand basins ; admission by coin-operated turnstile.

Gentlemen's (Private) Conveniences, Bruce Embankment.—3 W.C.'s in cubicles ; 4-stalled urinal ; 4 wash-hand basins. Admission by coin-operated turnstile.

Gentlemen's (Public) Conveniences, Bruce Embankment.—3 W.C.'s in cubicles, with coin-operated locks ; 1 W.C. in cubicle for use of Town Council Staff. 9-stalled urinal.

Gentlemen's Convenience, Harbour.—2 W.C.'s in cubicles, with coin-operated locks and 2-stalled urinal.

Gentlemen's Conveniences, Kirkhill.—2 W.C.'s in cubicles, with coin-operated locks, and 2-stalled urinal.

East Bents Putting Green.—1 W.C. in cubicle, with coin-operated lock and 2-stalled urinal for Gentlemen ; and 1 W.C. in cubicle with coin-operated lock for ladies.

Kinburn Public Park.—1 W.C. in cubicle, with coin-operated lock and 2-stalled urinal for Gentlemen ; and 1 W.C. in cubicle, with coin-operated lock for ladies.

No further progress has been made in connection with the provision of public conveniences at the East Sands, and at the moment the negotiations between the Town Council and the owners of the land have broken down completely.

As was stated in my report last year there is a need for a public convenience in the Argyle Street or Bridge Street area of the Burgh, and also in the vicinity of the Woodburn Playing Field, but so far no sites are available.

DRAIN TESTING.

The smoke test was applied to the drainage of the following properties during the year :—

- Shop (Mrs. Taylor Ltd.). New Fireclay drain.
 Dyers Brae. New fireclay drain at garage.
 Bungalow, Greyfriars Garden. (Miss Lamb.) New drainage.
 Municipal Houses. (10th Development.) New drainage and sanitary fittings for 64 houses.
 Bungalow, Rathalpie. (Mr. Wilson.) New drainage.
 7 Bungalows, Nelson Street. (Messrs. Livingstone.) New drainage.
 "Mansefield," St. Mary's Place. New Drainage.
 Bungalows, Park Street. (Messrs. Livingstone.) New drainage.
 "Thorncroft," Hepburn Gardens. New drainage.
 26 North Street. Section of new fireclay drain.
 29 Market Street. New iron and fireclay drainage.
 "Blythswood," Kinnessburn Road. Section of new drain.
 "Edgecliff West," Scores. Section of new fireclay drain.
 "Swallowgate," Scores. New fireclay drain.
 "The Ridge." Existing drainage.
 134-138 South Street. Existing drainage.

SLAUGHTERHOUSE.

The premises continue to be well kept by the Superintendent, and were always found in a clean condition.

The following table gives the number of animals slaughtered and the seizures of meat and offal during the year :—

	Cattle.	Sheep.	Pigs.	Calves.	Total.
No. of animals slaughtered	1172	3172	381	37	4762
No. of carcasses wholly seized	9	5	—	2	16
No. of carcasses of which portions were seized	25	3	—	—	28
No. of carcasses of which organs and/or offal were seized	664	56	4	—	724
No. of carcasses wholly seized for :—					
1. Tuberculosis	8	—	—	—	8
2. Other Diseases	1	5	—	2	8
No. of carcasses of which portions were seized for :—					
1. Tuberculosis	16	—	—	—	16
2. Other Diseases	9	3	—	—	12

The following table gives the number of carcasses wholly and partially seized :—

		Wholly seized.	Weight.	Partially seized.	Weight.	Total Weight in lbs.
Cattle	..	9	7253	25	1539	8792
Sheep	..	5	363	3	40	403
Pigs	..	—	—	—	—	—
Calves	..	2	228	—	—	228
		16	7844	28	1579	9423

The following table gives the seizures of organs and offal :—

		No. of Seizures.	Weight in lbs.
Cattle	.. ..	664	9102
Sheep	.. ..	56	112
Pigs	.. ..	4	17
Calves	.. ..	—	—
		724	9231

The following table gives the total seizures of all condemned meat and offal :—

		Total Seizures.	Total Weight in lbs.
Cattle	.. ..	698	17,894
Sheep	.. ..	64	515
Pigs	.. ..	4	47
Calves	.. ..	2	228
		768	18,654

The total seizures during the year were :—

Meat	9423 lbs.
Offal	9231 lbs.
	18,654 lbs.

8 tons, 7 cwts., 1 qr., 22 lbs.

The following tables give the detail of the meat and offal condemned during the year 1937 :—

*Cattle.**Wholly Condemned.*

	8 for Tuberculosis	6643 lbs.
9 weighing 7253 lbs.	1 for Emaciation	610 lbs.
	9	7253 lbs.

Partially Condemned.

	16 for Tuberculosis	1082 lbs.
25 weighing 1539 lbs.	5 for Actinomyces	196 lbs.
	4 for Bruising	261 lbs.
	25	1539 lbs.

17 894
lbs.

Organs and Offal Condemned.

	38 for Tuberculosis	1112 lbs.
664 weighing 9102 lbs.	23 for Fluke	382 lbs.
	39 for Abscesses	797 lbs.
	564 for Cirrhosis	6811 lbs.
	664	9102 lbs.

*Sheep.**Wholly Condemned.*

	1 Fevered	82 lbs.
5 weighing 363 lbs.	1 Uraemia	68 lbs.
	3 Septicemia	213 lbs.
	5	363 lbs.

Partially Condemned.

	2 Fevered	39 lbs.
3 weighing 40 lbs.	1 Bruising	1 lb.
	3	40 lbs.

515 Lbs.

Organs and Offal Condemned.

	53 Necrosis	103 lbs.
56 weighing 112 lbs.	1 Fatty	2 lbs.
	2 Abscesses	4 lbs.
	56	112 lbs.

*Pigs.**Wholly Condemned.*

None.

Partially Condemned.

None.

Offal and Organs Condemned.

4 weighing 17 lbs.	3 Abscesses	12 lbs.
	1 Cirrhosis	5 lbs.
	4	17 lbs.

17 lbs.

*Calves.**Wholly Condemned.*

2 weighing 228 lbs.	1 Uraemia	170 lbs.
	1 Septicemia	58 lbs.
	2	228 lbs.

228 lbs.

Offal and Organs Condemned.—None.

The following is the detail of carcasses and offal seized and destroyed during the year :—

9 Cattle weighing 7,253 lbs. were wholly condemned during the year ; 8 for Generalised Tuberculosis weighing 6,643 lbs. and 1 for Emaciation weighing 610 lbs. ; in addition 25 portions of carcasses weighing 1,539 lbs. were condemned ; 16 for Tuberculosis, weighing 1,082 lbs. ; 5 for Actinomycosis, weighing 196 lbs. and 4 for Bruising, weighing 261 lbs., or a total weight of 8,792 lbs.

There were also 664 seizures of offal and organs, weighing 9,102 lbs. condemned ; 38 for Tuberculosis weighing 1,112 lbs. 23 for Fluke weighing 382 lbs. ; 39 for abscesses weighing 797 lbs ; and 564 for Cirrhosis weighing 6,811 lbs.

Five sheep weighing 363 lbs. were wholly condemned during the year ; 1 for Uraemia weighing 68 lbs., 1 for Fevered Flesh, weighing 82 lbs. ; and 3 for Septicemia, weighing 213 lbs. In addition, 3 portions of carcasses weighing 40 lbs. were condemned, 2 for Fevered Flesh, weighing 39 lbs., and 1 for Bruising, weighing 1 lb., or a total weight of 403 lbs.

There were also 56 seizures of offal and organs weighing 11 lbs. ; 53 for Necrosis weighing 106 lbs. ; 1 for Infiltration, weighing 2 lbs. ; and 2 for Abscesses, weighing 4 lbs.

No carcasses of Pigs were Wholly or Partially condemned during the year, and only 4 seizures of offal and organs weighing 17 lbs. were made : 3 for Abscesses weighing 12 lbs. ; and 1 for Cirrhosis weighing 5 lbs.

2 Calves, weighing 228 lbs., were wholly condemned during the year : 1 for Uraemia, weighing 170 lbs. ; and 1 for Septicemia, weighing 58 lbs. No partial seizures or seizures of organs and offal were made.

Class of Animal.	Number of Animals.			Weight in Lbs. of Condemed Meat and Offal.
	Slaughtered.	Wholly Condemed.	Partially Condemed.	
Cattle	1172	9	25	17,894
Sheep	3172	5	3	515
Pigs	381	—	—	17
Calves	37	2	—	228
Totals	4762	16	28	18,654

FACTORY AND WORKSHOPS.

Forty visits of inspection were made to Factories and Workshops within the Burgh, and only in three instances was it found necessary to draw attention to minor defects which required attention. These defects were speedily remedied.

The inspections were as follows :—

Factories	..	..	14
Workshops	..	..	17
Workplaces	..	..	9
			—
			40
			—

Three notices were received from H.M. Inspector of Factories, but on inspection the work specified had been carried out, following upon the intimation made by the Inspector during his visits.

There are 111 Workshops and 34 Factories on the register at present.

NUISANCES.

Twenty-three complaints of alleged nuisances were received during the year ; five of these being written and 18 verbal.

All complaints were investigated and the necessary action taken. Seven intimations were issued in terms of Section 19 of the Public Health (Scotland) Act, 1897, and the verbal instructions given had the desired effect.

The question of the fouling of footpaths by dogs has been dealt with elsewhere, and at the present there are 603 licensed dogs in the Burgh, one dog for every 14 of the population.

FOOD AND DRUGS ACT.

Thirty-eight “ official samples ” and 10 “ Test Samples ” were procured and submitted for analysis during 1937. The following table gives the articles purchased for the “ Official Samples,” and the result of the analysis :—

Article.	Total Samples.	Certified Genuine.	Certified Adulterated.	Penalties.
Sweet Milk	.. 28	27	1	—
Sausages	.. 2	2	—	—
Minco ..	.. 2	2	—	—
Whisky ..	.. 4	3	1	20/-
Beer ..	.. 2	2	—	—
Totals ..	.. 38	36	2	20/-

The Vendor of the "Non Genuine" sample of Sweet Milk was found Not Guilty.

The seller of the "Non Genuine" sample of Whisky was fined 20s.

The following is the result of the Analysis of the "Non Genuine" Sample of Sweet Milk :—

Water	..	..	88.80	
Total Solids	..	..	11.20	
			<hr/>	100.00
Fat	..	..	3.07	
Non Fatty Solids	..	..	8.13	Deficit in Non-Fatty Solids.

The result of the analysis of the "Non Genuine" sample of whisky showed that it had been adulterated with water sufficient to reduce the strength to 42 degrees Under Proof (42° U.P.) being seven degrees Under Proof (7° U.P.) below the prescribed strength of thirty-five degrees Under Proof (35° U.P.).

The following table gives the articles purchased for the "Test Samples" and the result of the analysis :—

Article.			Total Samples.	Certified Genuine.	Certified Adulterated
Cooked Green Peas	..	..	1	1	—
Tea	..	..	1	1	—
Mixed Spice	..	..	1	1	—
Golden Syrup	..	..	1	1	—
Baked Beans	..	..	1	1	—
Breakfast Chocolate	..	..	1	1	—
Lemon Sponge Mixture	..	..	1	1	—
Cake Flour	..	..	1	1	—
Self-Raising Flour	..	..	1	1	—
H.P. Sauce	..	..	1	1	—
Totals	..	..	10	10	—

Of the 27 "Genuine" Samples of Sweet Milk, the highest "Fat" content was 5.98 and the lowest 3.02; while the highest "Non Fatty Solids" was 9.08 and the lowest 8.50.

The average "Fat" content of the 27 samples was 3.87 and the average "Non Fatty Solids" was 8.83.

UNHEALTHY FOODS.

During the year the following articles of food were seized and destroyed as being unfit for human consumption :—

1 Tin Boiled Ham weighing	9 lbs. 3 ozs.
13 Tins Boiled Gammon	„ 171 lbs. 5 ozs.
48 Tins Peaches	„ 24 lbs. 0 ozs.
<hr/>	<hr/>
Total 62 Tins.	204 lbs. 8 ozs.
<hr/>	<hr/>

SHOPS ACTS.

Ninety-seven visits were made during the year, in terms of the Shops Acts, particularly as to closing and the sale of articles after hours. Several warnings had to be given for contraventions. There are 221 shops on the register at present.

BURGH POLICE ACTS.

During the year 74 Warrants were granted by the Works Committee of the Town Council. Five notices were issued in the terms of section 164 of the Act of 1892, and three notices in terms of Section 117 of the same Act.

PLACES OF PUBLIC ENTERTAINMENT.

The two Picture Houses were visited and inspected from time to time with regard to their general sanitary condition, and it is gratifying to report that both places are well managed and call for no comment.

The "Cinema House."

This hall has a seating capacity for 863 persons : 630 in the area and 233 in the balcony.

The hall measures 105 feet in length and 42 feet in breadth and has a Cookroom and Ladies' and Gent.'s Toilet Rooms.

The ventilation of the building is well arranged, the ascension of vitiated air being accelerated in the outlet tubes by means of a suction fan, capable of completely changing the air five times in one hour. There are also eight wall ventilators.

The "New Picture House."

This hall has a seating capacity for 932 persons : 680 in the area and 252 in the balcony.

The hall measures 87 feet in length and 51 feet in breadth and has Ladies' and Gent.'s Toilet Rooms.

The ventilation of the building is on a balanced system which eliminates draughts. The vitiated air is drawn out by a suction fan and pure air is blown in. The incoming air is purified and warmed before being distributed.

The heating is by means of radiators, and ample provision of windows has been made. The windows are fitted with "Vita Glass" which admits to the fullest extent the germ-destroying rays of the sun.

There is also an up-to-date installation in the form of an electric vacuum cleaning plant, whereby all seats and carpets can be thoroughly cleaned.

The "Byre Theatre."

The Byre Theatre was opened during the year for the performance of plays to the public, and as the name suggests, this theatre is a reconstructed building. The place is not large, and as the Club consists of local amateurs, no major alterations were carried out on the building, and the Club have been working under difficulties. There are no sanitary conveniences within the building for the players or audience, but so far the need for these has not arisen.

SANITARY CONVENIENCES.

In regard to the provision of sanitary conveniences in properties in the Burgh, the position is that there are 79 W.C.'s used in common : 48 by 2 tenants ; 20 by 3 tenants and 11 by 4 tenants.

There are 33 houses without internal water supply ; 8 of these dwellings, however, have been scheduled for action under the Housing Acts.

The large majority of houses without internal water supply, or where W.C.'s are used in common, are old, and will be dealt with as being unfit, in the other cases practical difficulties exist in relation to the situation of the houses.

BUILDINGS.

Applications submitted to and approved of by the Works Committee of the Town Council may be classified as under :—

New Private Houses	..	..	..	3
Alterations to Houses	..	..	..	34
Alterations to Business Premises	..	..	..	11
Miscellaneous (Garages, etc.)	..	..	..	25
New Block at Cottage Hospital	..	..	..	1
New Church Hall	..	..	..	1
Total				75

One hundred and twelve new houses were erected and passed for Occupation during the year, as follows :—

Municipal Houses	..	..	..	86
Non-State-Aided Houses	..	..	..	26
Total				112

The following table gives the number of new sanitary fittings provided in connection with the foregoing alterations and new buildings :—

	36 Baths.
	99 Wash-hand basins.
	59 Water-Closets.
	4 Slop Closets.
	20 Sinks.
	10 Wash-tubs.
	16 Spray Baths.
<hr/>	
Total	244
<hr/>	

or 2,071 new sanitary fittings provided within the Burgh during the past 7 years.

BURIALS.

One burial, in terms of Section 69 of the Public Health (Scotland) Act, 1897, was carried out during the year. This was an adult male, aged 71 years, and the cost to the Department was £8 1s 6d, no part of which was recovered.

SCHOOLS.

The schools within the Burgh continue to be well maintained, and no action was called for in this direction.

BURIAL GROUNDS.

No complaints were received regarding the condition of any of the burial grounds within the Burgh.

HOUSING.

REPORT for the year ended 31st December 1937, on proceedings taken with regard to the Inspection, Improvement and Demolition and Closure of Dwelling-Houses.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS (SCOTLAND), 1928.

1. Number of dwelling-houses inspected :—

(a) During year	..	..	..	19
(b) Since 1st January 1931	..	..	..	308

2. Number of dwelling-houses which on inspection were considered to be in any respect unfit for human habitation :—

(a) During year	..	..	..	9
(b) Since 1st January 1931	..	..	..	235

BURGH POLICE (SCOTLAND) ACT, 1892.

- | | |
|--|---|
| 3. Number of houses in respect of which notice was given during year under Section 246 requiring provision of a sufficient water-closet | — |
| 4. Number of houses where requirements were complied with by owners during year | — |
| 5. Number of houses where works carried out by Town Council during year after failure of owners to do so | — |
| 6. Number of houses for which water-closets were provided during year at instance of Town Council without formal notice under section 246 | — |
| 7. Number of houses in respect of which notice was given during year under Section 246 requiring provision of inside water supply and sink | — |
| 8. Number of houses in which requirements were complied with by owners during year | — |
| 9. Number of houses in which works carried out by Town Council during year after failure of owners to do so | — |
| 10. Number of houses in which inside water supply and sink were provided during year at instance of Town Council without formal notice under Section 246 | — |

HOUSING (SCOTLAND) ACT, 1925.

- | | |
|--|---|
| 11. Number of houses of (a) one apartment, and (b) two (a) —
apartments, for erection of which consent of Town
Council was given during year in terms of Section
one hundred and eleven (b) — | — |
|--|---|

HOUSING (SCOTLAND) ACT, 1930.

- | | |
|--|----|
| 12. Number of dwelling-houses in respect of which notices were served during year under Section 14 (1) | 4 |
| 13. Number of dwelling-houses rendered fit for human habitation during year following on notices under Section 14 (1) | — |
| 14. Number of dwelling-houses in respect of which work has been done during year by Town Council under Section 15 (1) | — |
| 15. Number of dwelling-houses in respect of which in terms of Section 17 a demolition order or closing order under Section 16 (3) has been substituted during year for a notice under Section 14 (1) | 1 |
| 16. Number of dwelling-houses in respect of which notices were served during year in terms of Section 16 (1) | 44 |

17. Number of dwelling-houses in respect of which, following on notice under Section 16 (1) :—

(a) Undertaking has been given during year that house will not be used for human habitation until it has been rendered so fit	26
(b) Undertaking has been given during year that house will be rendered fit	—
(c) Demolition orders have been made during year under Section 16 (3)	—
(d) Closing orders have been made under Section 16 (3) and (4)	—

18. Number of dwelling-houses rendered fit during year following on undertakings under Section 16 (2) .. 2

19. Number of dwelling-houses rendered fit for human habitation during year at instance of Town Council without formal notice under Housing (Scotland) Act, 1930 —

20. Number of dwelling-houses in respect of which closing orders have, in terms of Section 16 (3), been determined by Town Council during year following upon houses having been rendered fit for human habitation .. —

21. Number of houses in respect of which advances have been made during year in terms of Section 34 towards cost of repairs and amount so advanced —

The position at the end of the year, in relation to the provision of houses by the Town Council is summarised as follows :—

Development.		Year.	1 apt.	2 apts.	3 apts.	4 apts.	5 apts.	Total
1st (Renovation)	85	1919	4	5	4	4	—	17
1st		1921	—	—	20	36	12	68
2nd	50	1924	—	—	32	18	—	50
3rd	51	1925	—	—	36	15	—	51
4th	24	1926	—	24	—	—	—	24
5th	50	1927	—	20	20	10	—	50
6th	48	1929	—	48	—	—	—	48
7th	8	1932	—	20	52	12	—	84
8th	46	1933	—	—	40	6	—	46
9th	54	1934	—	—	12	—	—	12
9th		1935	—	12	24	6	—	42
10th	120	1936	—	—	20	8	6	34
10th		1937	—	—	64	16	6	86
Totals ..	612	—	4	129	324	131	24	612

In comparison to the above, the following table gives the number of dwelling-houses erected by Private Enterprise during the same period.

Year.	1 apt.	2 apts.	3 apts.	4 apts.	5 apts.	6 apts. or more.	Total.
1919	—	—	—	—	—	—	—
1920	—	—	—	—	—	—	—
1921	—	—	—	—	—	—	—
1922	—	—	—	—	—	—	—
1923	—	—	—	—	—	—	—
1924	—	—	3	—	—	—	3
1925	—	—	2	—	2	—	4
1926	—	—	—	—	—	1	1
1927	—	—	—	—	3	—	3
1928	—	—	—	2	—	—	2
1929	—	—	—	—	1	—	1
1930	—	—	—	4	—	—	4
1931	—	—	—	2	—	—	2
1932	—	—	1	7	1	—	9
1933	—	—	—	1	3	—	4
1934	—	—	2	3	11	7	23
1935	—	—	2	4	7	7	20
1936	—	1	4	10	13	6	34
1937	—	—	3	10	4	9	26
Totals	—	1	17	43	45	30	136

The total for the year 1932 does not include a few houses which were outwith the Burgh Boundary previous to the Burgh Extension effected during that year.

During the year the 10th Development of the Housing Schemes was completed and fully occupied. The scheme comprised a total of 120 houses, namely :—84 three-apartment houses, 24 four-apartment houses, and 12 five-apartment houses. Of the 120 houses, 34 were occupied up to the end of 1936, and the remaining 86 were completed and occupied during 1937. Of the 120 houses comprising this development, 82 were utilised for slum clearance and 38 for relief of overcrowding.

Since 1933, the total number of units displaced from unfit houses into houses belonging to the Local Authority is 885 and 83 units have been displaced but were not provided with accommodation. Of the 885 units accommodated in houses belonging to the Local Authority 157 were accommodated in 1933 ; 38 in 1934 ; 193 in 1935 ; 137 in 1936 ; 357 in 1937 and 3 in the early part of the present year.

The total number of properties which have been surveyed to date is 132 comprising 389 separate families with a total unit content of 1,305 persons. Of the 1,305 persons, 222 families, comprising 885 persons were accommodated by the Local Authority ; 40 families comprising 83 persons were displaced but not

accommodated, leaving 127 families of 337 persons still in residence. The 222 families were accommodated as follows:—Abbeycourt, 5 families comprising 8 persons; 1st Development, 1 family comprising 4 persons; 2nd Development, 3 families comprising 13 persons; 3rd Development, 3 families comprising 10 persons; 4th Development, 5 families comprising 12 persons; 5th Development, 8 families comprising 19 persons; 6th Development, 8 families comprising 16 persons; 7th Development, 6 families comprising 22 persons; 8th Development, 38 families comprising 166 persons; 9th Development, 58 families comprising 244 persons and 10th Development, 87 families comprising 371 persons.

The number of ordinary applicants on the Housing Register at the end of the year was 251, made up as follows:—two-roomed houses, 117, three-roomed houses, 94; and four and five-roomed houses, 40. Of the 251 applications, 193 applicants are resident in the Burgh and 58 outwith the Burgh. The local applications are as follows:—two-roomed houses, 99; three-roomed houses, 68; and four and five-roomed houses, 26. These figures refer to all applications, some of the applicants being already in possession of a house. Taking applications from persons living in furnished rooms and young people desiring to get married and from persons working in the Burgh, but resident outwith the Burgh, the total applications to be dealt with number 144: two-roomed, 84; three-roomed, 42; and four and five-roomed, 18.

The postal re-survey completed at the end of 1937 shows that the following houses are still required to relieve overcrowding:—three-roomed houses, 35; four-roomed houses, 17; and five-roomed houses, 3; a total of 55. In addition, the following houses are required to accommodate families still residing in houses, represented as unfit, excluding South Court and Abbey Court, in which 16 families ranging in size from 1 to 6 persons reside. One-roomed, 20; two-roomed, 55; three-roomed, 21; four-roomed, 3; a total of 99. After de-crowding operations have been completed, there will be a surplus of 9 one-roomed and 16 two-roomed houses. These will be available for 25 families not exceeding 3 "Adults" in size and presently residing in unfit houses. The total number of houses required, therefore, to relieve overcrowding and to replace unfit houses will be:—two-roomed, 50; three-roomed, 56; four-roomed, 20; five-roomed, 3; a total of 129. (It will be noted that the need for small houses greatly predominates.)

A portion of the Burgh is still to be surveyed with a view to the discovery of unfit houses, and it is estimated that the above total will be increased by approximately 30 houses.

At the moment there is in course of erection the first half of the 11th Development of the Housing Schemes, which when completed will produce 82 houses of the following sizes :—three-roomed 56 ; four-roomed, 16 ; five-roomed, 10 ; and these will be occupied by persons from either unfit or overcrowded houses, with the result that there will remain to be provided, in addition to the estimated 30 houses required for the part of the Burgh not yet inspected, the following number of houses :—two-roomed, 50 ; four-roomed, 4 ; a total of 54. There will, however, be a surplus of 7 new five-roomed houses, some of these at least will become occupied by families from the estimated 30 unfit houses. The total number of houses, therefore, yet required to be provided is 54 plus 30 minus 7 equals 77.

It has been agreed to proceed with the erection of the 2nd portion of the 11th Development and the following houses will be provided :—72 three-roomed houses and 12 four-roomed houses, making a total of 84 additional houses which it is estimated will be sufficient to accommodate all families from unfit and overcrowded houses.

It is estimated that there are 2,309 inhabited houses within the Burgh, as follows :—866 in Ward 1 ; 589 in Ward 2 ; and 854 in Ward 3. There are 161 separate dwellings in the Burgh which have been closed as a result of action taken under the Housing Acts and which have not yet been demolished, as follows :—Ward 1, 99 houses ; Ward 2, 47 houses ; and Ward 3, 15 houses. 75 houses accommodating 265 units have been demolished in the Burgh since 1933, 15 properties containing 23 houses having been demolished by the Town Council.

Since 1935 overcrowding has been relieved to the extent of 43 houses. 40 Municipal and 3 private houses involving 257 persons. The 40 Municipal houses involved 239 persons and the 3 private houses 18 persons. The 40 Municipal houses comprised 23 of two rooms, 14 of three rooms, and 3 of four rooms. No families were re-housed in privately-owned houses and there is no known case in which a dwelling-house, in respect of which the Town Council has relieved overcrowding, has again become overcrowded.

A re-survey completed at the end of the year showed that the number of houses still overcrowded were 124 :—9 of one room, 60 of two rooms, 42 of three rooms, and 13 of four rooms, compared with 5 of one room, 72 of two rooms, 52 of three rooms, and 13 of four rooms, making a total of 142 at the census taken in 1935. The position has improved but much remains to be done.

INFECTIOUS DISEASE.

Ninety-two cases of Infectious Diseases were notified during the year as follows :—

Influenzal Pneumonia ..	..	..	..	..	9
Cerebro-spinal Meningitis ..	..	..	..	..	1
Scarlet Fever ..	..	..	..	..	9
Diphtheria ..	..	..	..	..	2
Erysipelas ..	..	..	..	..	3
Acute Poliomyelitis ..	..	..	..	..	2
Primary Pneumonia ..	..	..	..	..	2
Dysentery ..	..	..	..	..	56
Puerperal Pyrexia ..	..	..	..	..	2
Pulmonary Tuberculosis ..	..	..	..	..	4
Non-pulmonary Tuberculosis ..	..	..	..	..	3
					—
					92
					—

The following table gives the age group of the patients, and the number treated in Hospital :—

Disease.	All Ages	Und'r 1 yr.	1-5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	45-65 yrs.	65 & up.	In Hos.	Not in Hos.
Scarlet Fever, ..	9	..	3	3	1	2	..	..	9	..
Diphtheria, ..	2	..	..	..	2	..	..	..	2	..
Acute Primary Pneumonia,	2	..	1	..	..	..	1	..	1	1
Acute Influenzal Pneumonia,	8	..	..	..	1	..	4	3	4	4
Pulmonary Tuberculosis,	4	..	..	1	..	3	..	..	2	2
Non-Pulmonary Tuberculosis,	3	..	1	2	..	..	..	..	1	2
Puerperal Pyrexia, ..	2	..	..	..	1	1	..	..	1	1
Opthalmia Neonatorum,	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis	1	..	..	1	..	..	..	..	1	..
Erysipelas	3	1	..	..	..	1	1	..	..	3
Acute Poliomyelitis ..	2	..	..	2	..	..	..	..	1	1
Dysentery	56	..	9	11	10	14	9	3	1	55
Totals,	92	1	14	20	15	21	15	6	23	69